Holden

# OWNER'S HANDBOOK

LE SERIES

# Vehicle Identification Certificate

Owner's Name .....

Address .....

Town .....

State .....Postcode .....

Model Name .....

Reg. No. .....Eng. No. .....

Odometer Reading .....

Date of Purchase .....

Vehicle Identification Number

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | |

Selling Dealer's Stamp & Signature .....

## Change of address/ownership

General Motors-Holden's Automotive Limited, hereinafter Holden's, requests that owners who change their address (or name) or subsequent owners who purchase this car, complete and return by mail one of the forms at the rear of this Handbook.

This notification is important even after the expiration of the original warranty in order that Holden's will be able to contact you should the need arise.

**Part No. 01999-02408**
June 1989 (Print 2)

# Foreword

Welcome to the growing group of value-conscious people who drive Holdens. We are proud of the advanced engineering and quality construction of each vehicle we build.

We invite you to read through this Owner's Manual. It is designed to acquaint you with the features of your new Holden and to help you enjoy many kilometres of motoring pleasure.

When it comes to service, remember that your Holden Dealer knows your vehicle best and is interested in your complete satisfaction. He will provide quality maintenance and any other assistance you may require.

Please leave this manual in the vehicle at the time of resale as the next owner will also need the information.

Please Note: This book explains how to operate the accessories and equipment found in your vehicle. Also, maintenance and service information is given. Extensive coverage is given so that individual owners can gain knowledge of their Holden Model. However, the explanations, illustrations and specification details herein, are not to be taken as representing that your vehicle has any particular item fitted to it nor any feature referred to herein. Further, even though the information and specifications in this manual are current at the time of printing, vehicle production changes can occur and, consequently, some of the explanations and specifications might not apply to your Holden.

Issued by: General Motors-Holden's Automotive Limited, herein after, Holden.

## Modification of your Holden

Please be aware that any modification of your Holden could affect its performance, safety, durability or warranty, and may even violate governmental regulations.

## Installation of a mobile two-way radio system

As the installation of a mobile two-way radio system in your vehicle could affect electronic systems, be sure to check with your Holden Dealer for precautionary measures or special instructions regarding installation.

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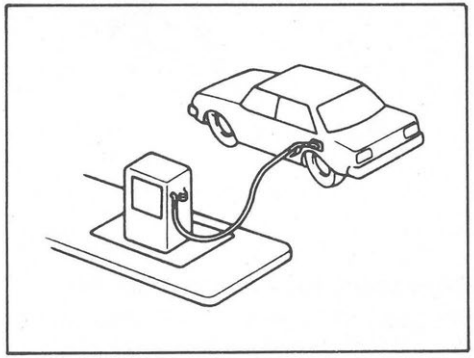
# Information for the new owner — Section 1

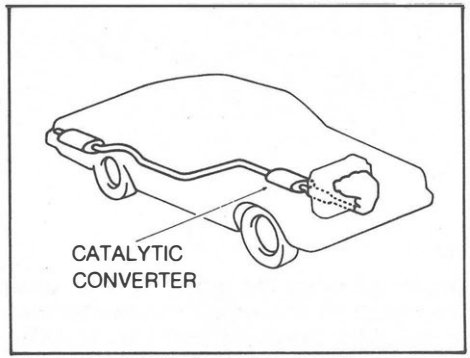
## Fuel recommendation and the catalytic converter



**Use only unleaded petrol in your Nova as it is equipped with a catalytic converter.**

The catalytic converter is an emission control device installed in the exhaust system. It looks somewhat like a muffler, but its purpose is to reduce harmful constituents in the exhaust by oxidation and/or reduction. This involves an exothermic chemical reaction and generally results in the exhaust system attaining higher temperatures than non-converter type systems. Whilst heat shields and other measures have been implemented, where necessary to reduce the effects of heat on the environment and vehicle, it is ***recommended as safe practice that you do not drive, idle or park your vehicle where readily combustible materials such as grass, leaves, paper etc., are close to the exhaust system.*** As is the case with conventional exhaust systems, it is recommended that no work in the vicinity of exhaust is conducted on the vehicle whilst the engine is running or cooling down.

## Catalytic Converter location




**WARNING: Incorrect fuel and large amounts of unburned fuel flowing into the converter may cause it to overheat and/or reduce its life and efficiency. Similarly, certain engine malfunctions, particularly misfiring, create an excessive heat load on the converter.**

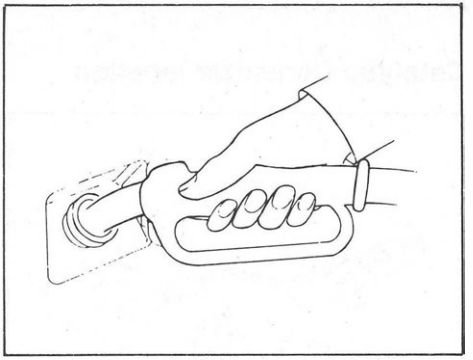
To prevent these effects, please observe the following precautions:

- Use only unleaded petrol (ULP). Leaded petrol will seriously damage the converter.
- Do not turn off the ignition while the vehicle is moving.
- Avoid racing the engine.
- Do not allow the engine to idle for more than 20 minutes.
- Do not push start or pull start your vehicle.
- Do not drive with an extremely low fuel level, running out of fuel could cause the engine to misfire.
- Keep your engine in good running order. Malfunctions in the engine, electrical, ignition, and carburation systems must be avoided.

- If the engine becomes difficult to start, stalls frequently or pings/knocks during acceleration, take your vehicle in for a check up as soon as possible. Remember, your Holden Dealer knows your vehicle and its catalytic converter system best.
- Do not continue operation of the vehicle if the engine is misfiring.

To ensure that the converter and entire emission system operates properly, your vehicle must receive the periodic inspections required by the Holden Maintenance Schedule given in Part "B" of this manual.

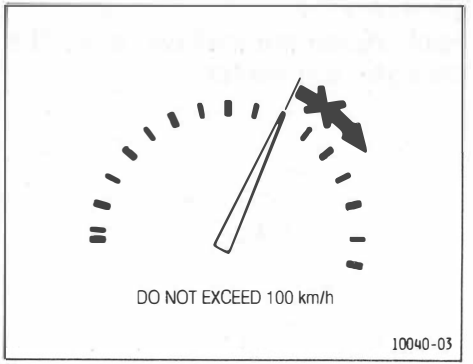
## Filling with unleaded petrol



**Before allowing the petrol to flow, push the nozzle hard enough to open the flap in the filler tube and continue pushing until the nozzle will go no further.**

Service stations sell both leaded and unleaded petrol. Leaded petrol is dispensed through nozzles larger than unleaded ones. To protect your car from being filled with leaded petrol it has a filler neck that is only wide enough to accept the unleaded petrol dispensing nozzle. As an added precaution, the filler tube contains a flap that will not open when a leaded petrol nozzle is inserted. Thus, leaded petrol will spill out of the filler instead of going into the fuel tank.

## Tips for driving the first 2000 km

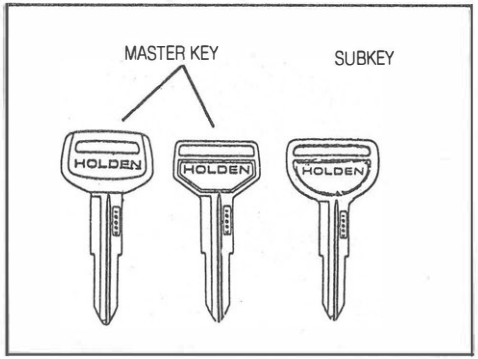



**Drive gently and avoid high speeds.**

You need not follow a "run-in" schedule with your new Holden. But following a few simple tips for the first 2000 km can add to the future economy and long life of your car:

- Do not drive over100 km/h.
- Maintain engine speed between 2000 and 4000 rpm.
- Avoid full-throttle starts.
- If possible, avoid hard stops during the first 300 km.
- Do not drive slowly with the transaxle in a high gear.
- Do not drive for a long time at any single speed, either fast or slow.
- Do not tow a trailer during the first 800 km.

## Keys (Sedan)




**The master key works in every lock. The subkey will not work in the boot.**

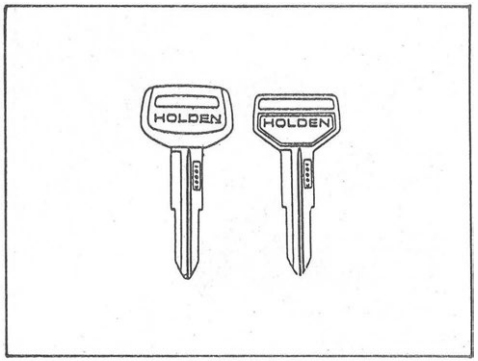
To protect things locked in the boot when you have your vehicle parked, leave the subkey with the attendant.

Since the door and boot lid can be locked without a key, you should always carry a spare master key in case you accidentally lock your keys inside the vehicle.

It is advisable to keep two of the keys in a safe place away from the vehicle, then, if you lose your key, you can use one of the spare ones.

Never leave your car with a key in the ignition switch or unlocked, when it is left unattended.

## Keys (Hatchback and Liftback)



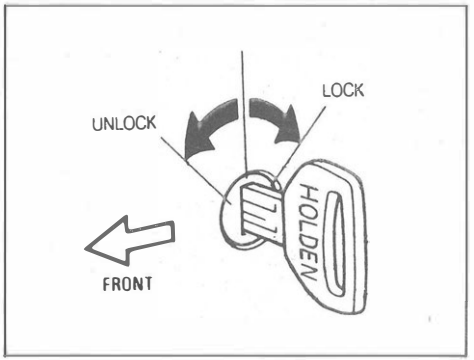

**The key works in every lock.**

Since the doors can be locked without a key, you should always carry a spare master key in case you accidentally lock your key inside the vehicle.

It is advisable to keep two of the keys in a safe place away from the vehicle, then, if you lose your key, you can use one of the spare ones.

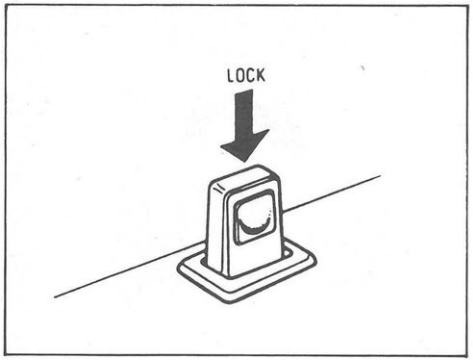
Never leave your car with a key in the ignition switch or unlocked, when it is left unattended.

## Door locks — Locking and unlocking with key




**Turn the key towards the front of the vehicle to unlock and towards the back to lock.**

## Locking from the inside

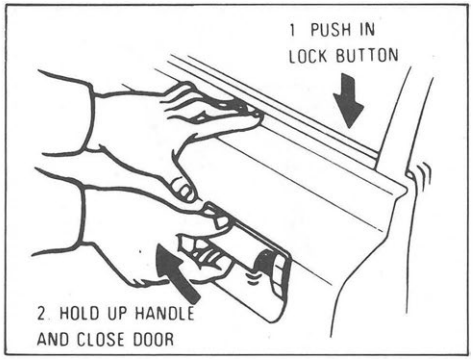



**After closing the door, lock it by pushing down on the lock button.**

When the door is locked as show above, it cannot then be opened with either the outside or the inside handle. ***We recommend locking the doors while driving, especially when small children are in the car.***

To unlock, lift the lock button.

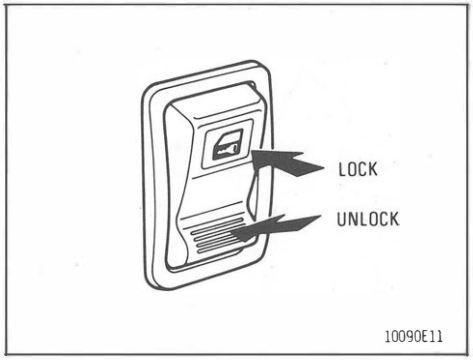
## Locking from the outside without key




**Push in the lock button. Then hold up the handle as you close the door.**

You need not hold up the handle when locking the rear doors. *Be careful not to lock your keys in the vehicle.*

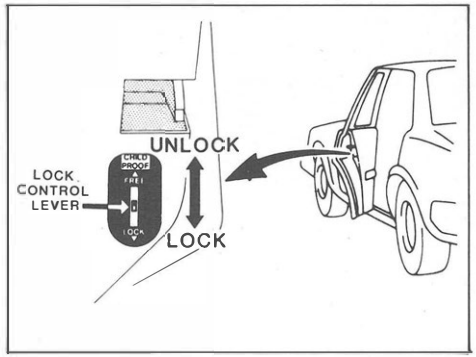
## Power door lock switch— (if fitted)




**To lock all the side doors simultaneously, push the switch on the LOCK side. Pushing on the opposite side will unlock them.**

For luggage compartment door locking and un-locking instructions, see page 38.

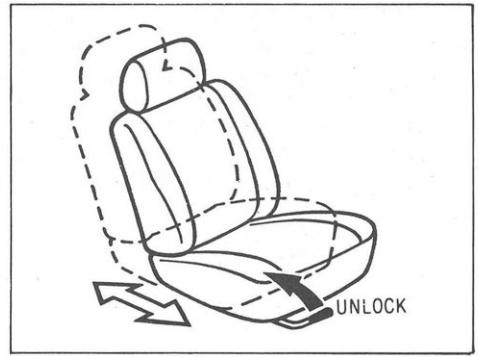
## Rear door child-protector




**Use the child-proof lock when carrying children on the rear seat.**

The function of the child-proof lock is to retain children in the rear of the vehicle by overriding the normal door locking and release mechanism. To operate, push the child-proof lock lever down (the door can then only be opened from the outside).

## Front seats — Adjusting seat position



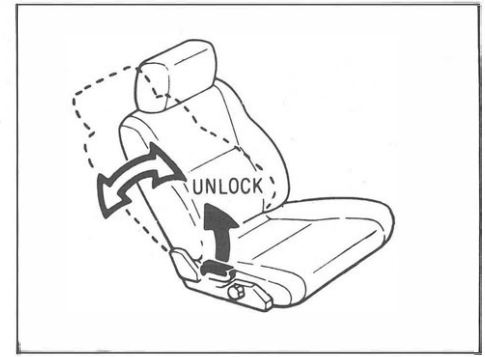

**Pull the lock release lever up. Then slide the seat to the desired position with slight body pressure and release the lever.**

After adjusting the seat, try sliding it forward and backward to make sure it is locked in position.

***This adjustment must not be made while the vehicle is moving.***

Do not place anything under the front seats. It might interfere with the seat-lock mechanism.

## Adjusting seatback angle



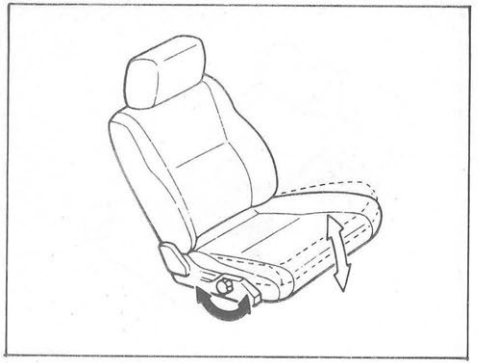

**Lean forward and pull the lock release lever. Then lean back to the desired angle and release the lever.**

After adjusting the seatback, exert body pressure to make sure it is locked in position. If desired, the seatbacks may be fully reclined. They return to the upright position when the lever is lifted and no weight is on them.

***This adjustment must not be made while the vehicle is moving.***

To reduce the risk of sliding under the lap belt during a collision, *avoid reclining the seatback any more than needed.* The seat belts provide maximum protection when the driver and the passenger are sitting well back and straight up in the seats.

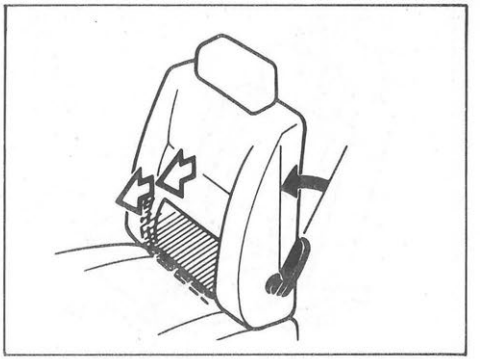
## Adjusting front seat cushion angle (if fitted)



**Turn the adjusting knob anti-clockwise to increase the angle of tilt and clockwise to decrease it.**

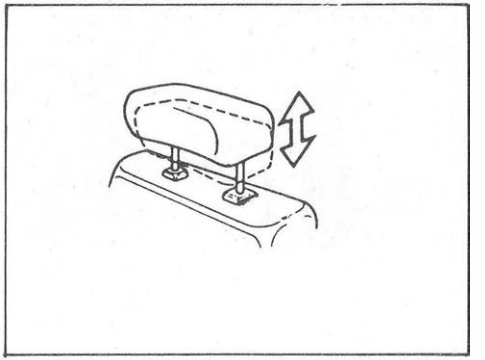
***This adjustment must not be made while the vehicle is moving.***

## Adjusting lumbar support (if fitted)



**To change the amount of lumbar support, move the adjusting lever forward or backward until the desired support is obtained.**

## Head restraint — Vertically adjustable type

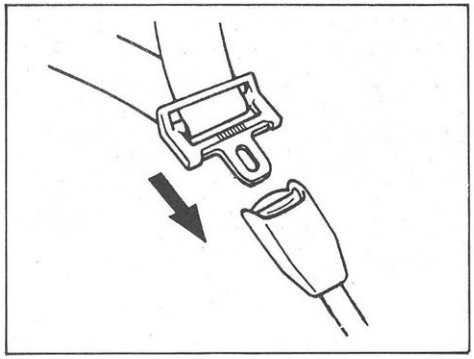


**To raise: Pull up on the head-restraint.**
**To lower: Press down on the head-restraint.**

***Adust the top of the headrestraint so that it is in line with the top of your ears. Do not drive with the headrestraint removed.***

The headrestraint is most effective when it is close to your head. Therefore, placing a cushion between the driver or passenger and the seatback is not recommended.

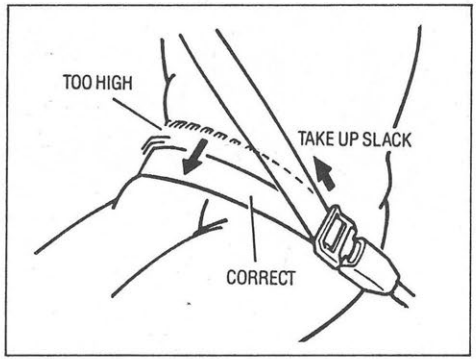
## Seat belts 3 point emergency locking retractor (ELR)



**To put on a front, or one of the two outer ELR rear passenger seat belts, pull the belt round your body and insert the tongue into the buckle.**

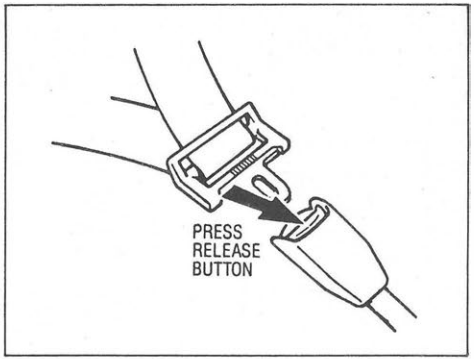
You will hear a "click" when the tongue locks into the buckle. Make sure the belt is not twisted.

The belt might lock if you pull it out too quickly. It should be pulled out slowly. The inertia reel will lock the belt during a fast stop or on impact, it also may lock if you lean forward too quickly. A slow easy motion will allow it to extend, and you can move around freely. Adjustment to your size and seat position is automatic.




**Adjust the belt position and allow the inertia reel to take up the extra length of the lap belt.**

The lap belt should **fit snugly and as low as possible on your hips** — not on your waist.

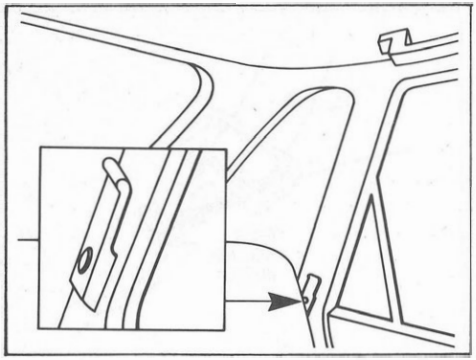



**To release a belt, press the buckle release button and allow the belt to retract.**

If the belt does not fully retract, pull it out and check for kinks or twisting. Then make sure that it remains untwisted as it retracts.

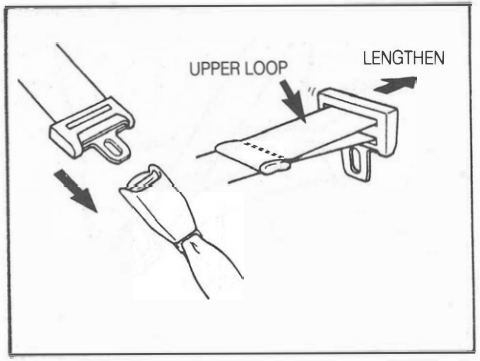
*continued overleaf*

## Belt hanger bracket



***Note: To avoid seat belt entanglement when the seat backs are folded down (see pages 39 and 40), slide the seat belts into the seat belt hanger brackets that are adjacent to the seat backs.***

## Rear seat belt 2-point (centre)

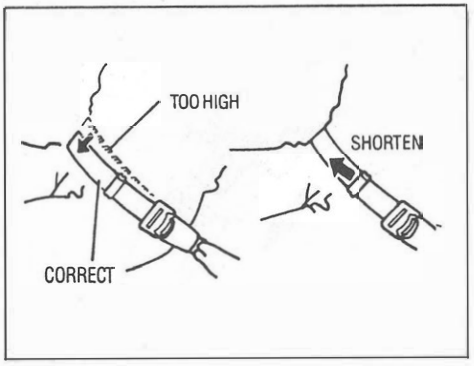



**To fit the belt, insert tongue into buckle.**

You will hear a "click" when the tongue locks into the buckle. Make sure the connection is secure and the belt is not twisted.

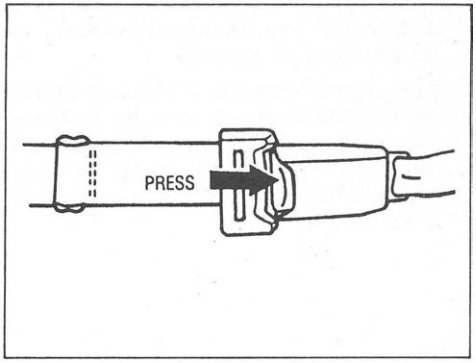
If the belt length has to be increased, hold the tongue at a right angle to the belt and pull on it.

***Note: When the rear seat backs and cushion have been replaced after having been folded (see pages 39 and 40), make sure that the seat belt tongue and buckle are positioned on top of the cushion so that they are accessible.***




**Remove excess length of belt and push the belt down over your hips.**

To adjust, tilt buckle and pull on the upper loop of belt. The lap belt should ***fit snugly and as low as possible on your hips***— not on your waist, then adjust it to a snug fit. Failure to do so could increase the chance of injury due to sliding under the lap belt during an accident.




**To release the belt, press the buckle-release button.**

## Seat belt tips

- **Children.** We recommend that they sit in the rear seat and be restrained with the seat belts. If the child is in the front seat, the child must be restrained by the seat belt. Do not allow the child to stand up or kneel on the seat.
- **Pregnant women.** Toyota recommends the use of a seat belt. Ask your doctor for specific recommendations. The lap belt should be worn securely and as low as possible over the hips and not on the waist.
- **Injured person.** Toyota recommends the use of a seat belt. Depending on the injury, however, first check with your doctor.
- **Babies and small children.** Special safety seats are available. We recommend their use, refer to Child restraint anchorage.
- ***Always make sure that all the occupants have their seat belts fastened before commencing to drive the vehicle.***

**WARNING:**

Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis, or the pelvis, chest and shoulders, as applicable, wearing the lap section of the belt across the abdominal area must be avoided.

No modifications and additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

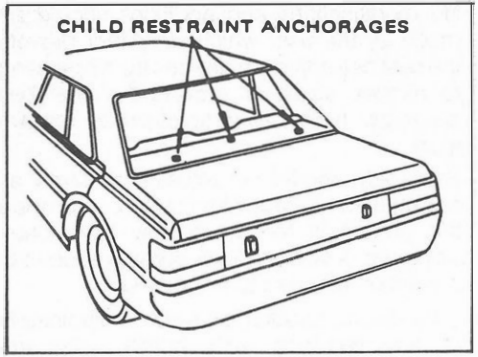
Care should be taken to avoid contamination of the webbing with polish, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

Belts should not be worn with straps twisted.

Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

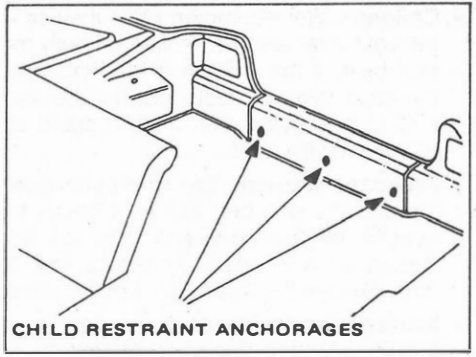
## Child restraint anchorage — sedan




**The sedan has three child restraint anchorage points concealed beneath plugs in the rear parcel tray. Remove the plugs to expose anchorage nuts.**

**WARNING:** Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.

## Child restraint anchorage — liftback type vehicle




**In liftback type vehicles, the child restraint anchorages are in the rear wall of the luggage compartment. Remove the plugs to expose the anchorage nuts.**

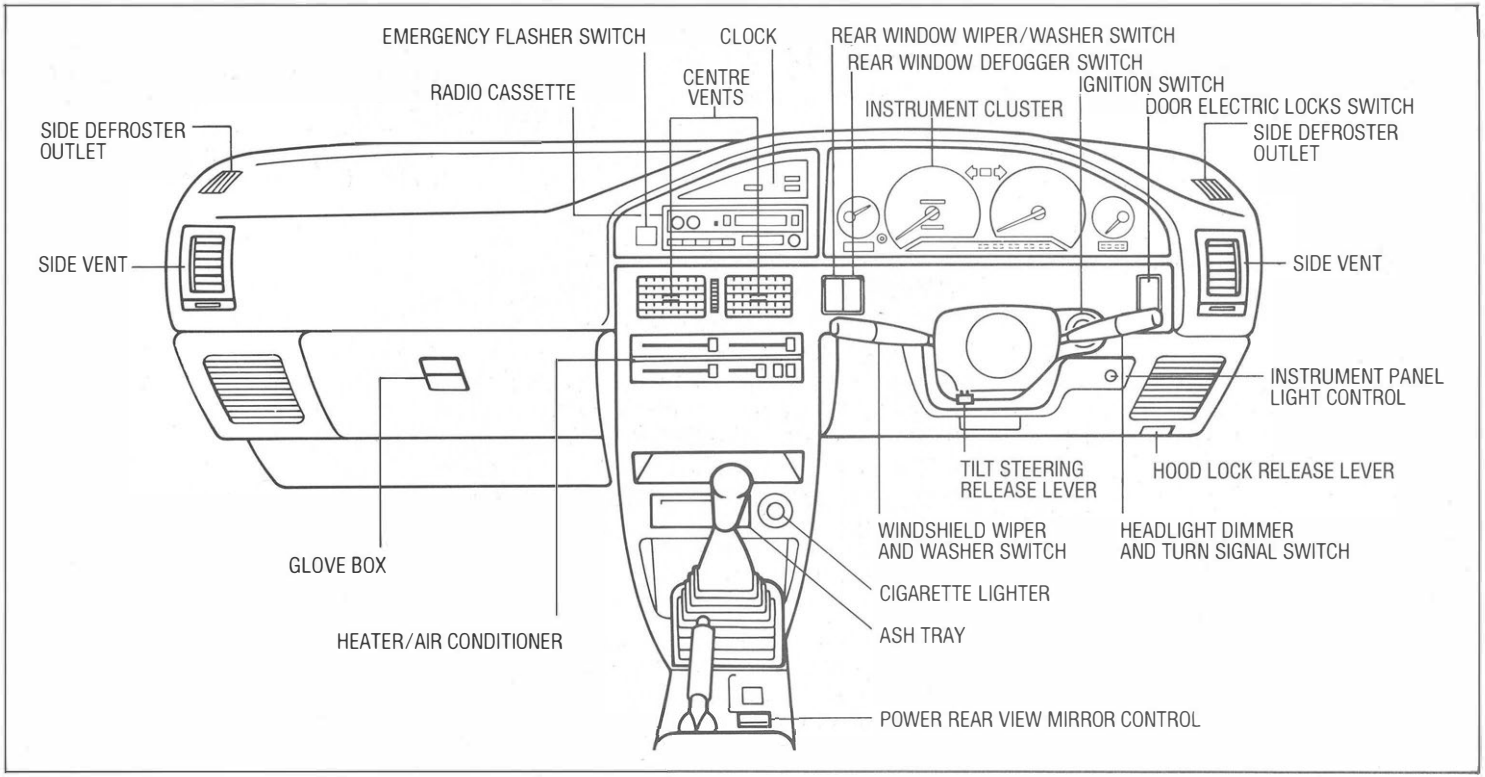
**WARNING:** Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.

***Notes:***

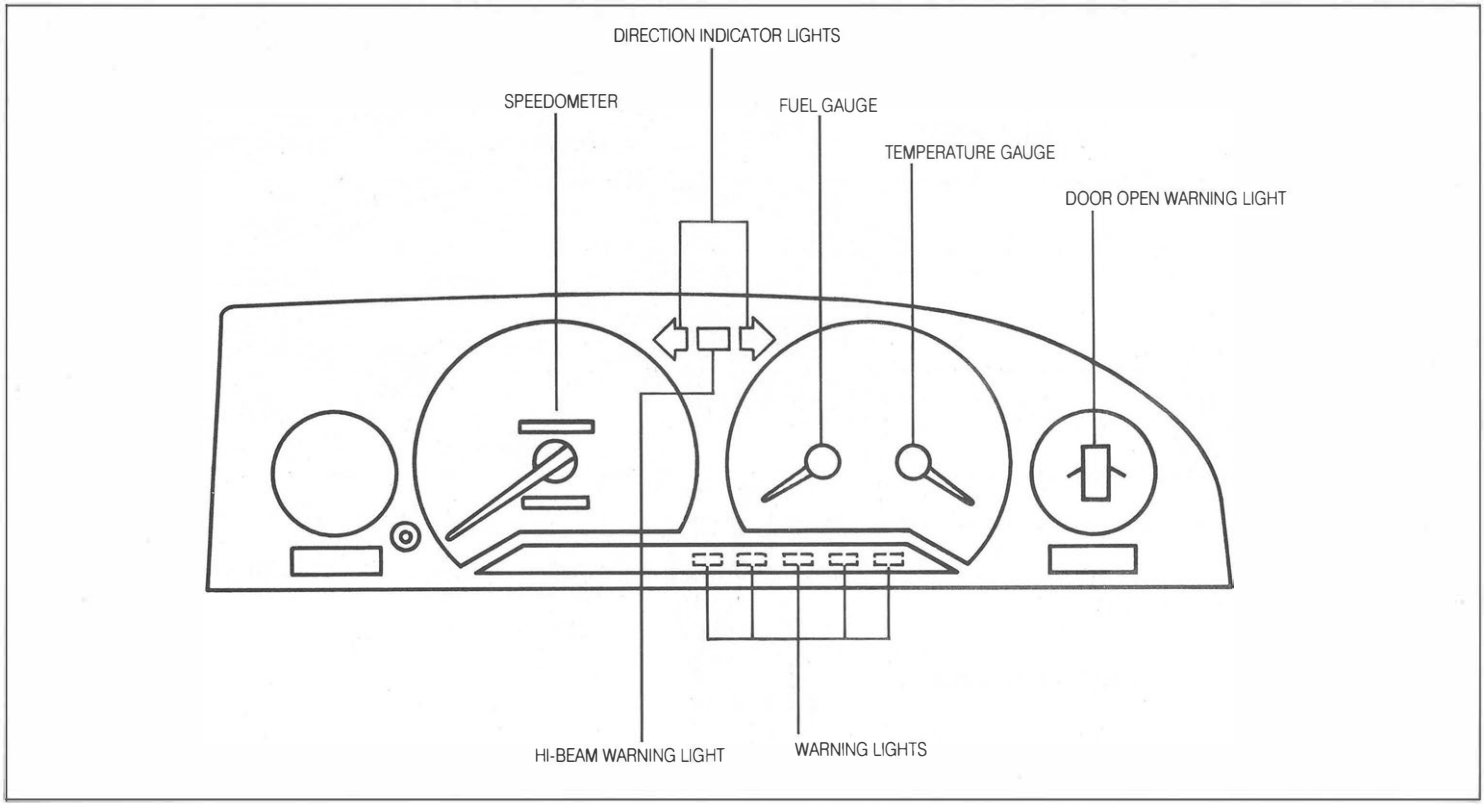
***i When using the centre anchorage, it is essential that the webbing strap from the child restraint seat or harness to anchorage, be adjusted to lie between the folding seat backs to eliminate all slackness.***

***ii If you travel with one of the seat backs folded (see pages 39 and 40) and you are taking a child passenger, attach the child restraint to the anchorage immediately behind the seat back that is not folded.***

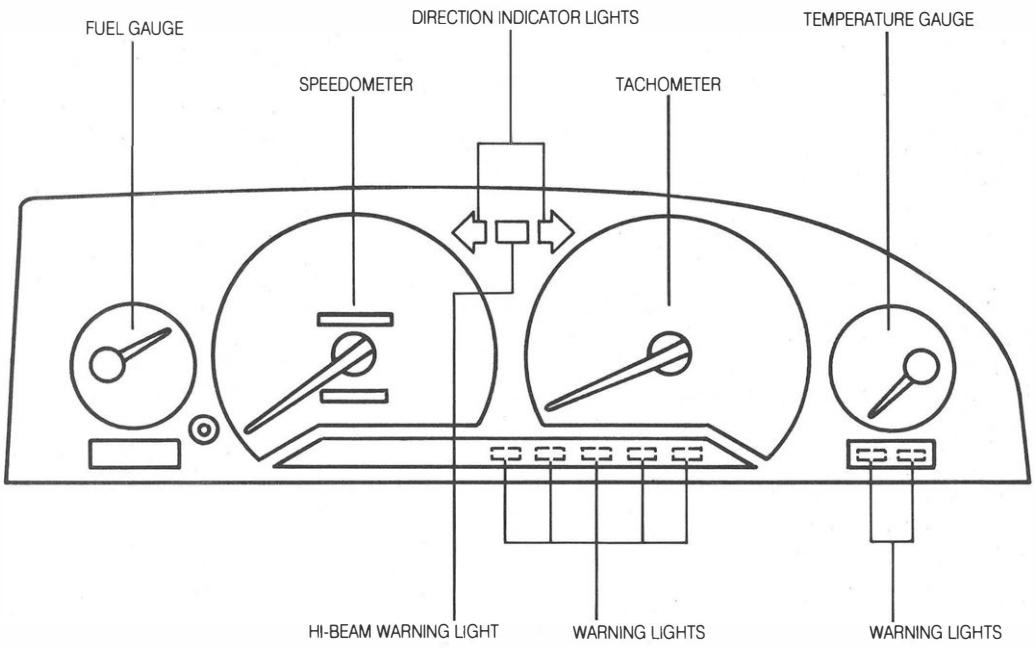
**Instrument panel overview showing SLE Model centre instrument cluster.**



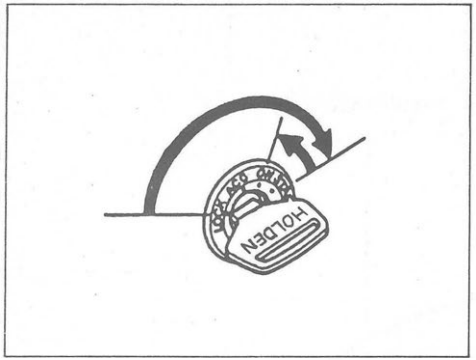
## Centre instrument cluster — SL and SLX Models



## Centre instrument cluster — SLE Model

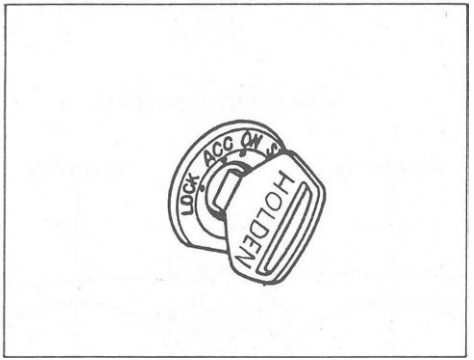


## Combination ignition switch and steering lock




**"START" — Starter motor on.**

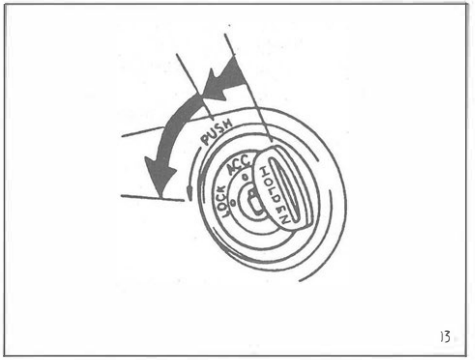
Before starting, place an automatic transaxle in "P" or "N", or a manual transaxle in neutral and depress the clutch pedal. As soon as the engine starts, release the key. It will return to the "ON" position. Do not crank the starter continuously for longer then the period recommended under "Driving tips — Section 3".




**"ON" — Engine on and all accessories on.**

This is the normal driving position. ***Do not leave the key in the "ON" position if the engine is not running.*** The battery will discharge and the ignition could be damaged.

**"ACC" — Radio can be turned on when key is in this position.**

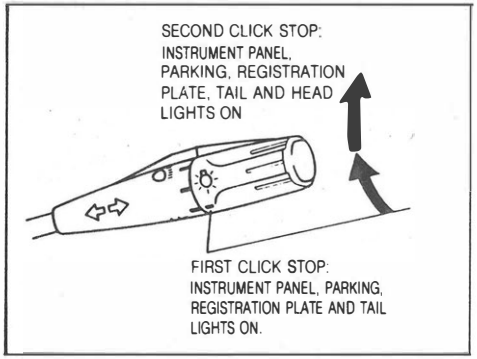



**"LOCK" — The steering wheel is locked. The key can be removed only at this position.**

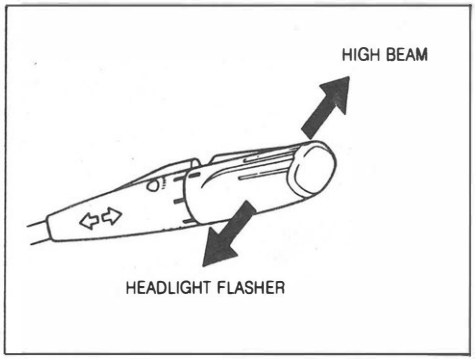
You must push in the key to turn it from "ACC" to the "LOCK" position. When starting the engine, the key may seem stuck at the "LOCK" position. To free it, first be sure the key is pushed all the way in, and then rock the steering wheel slightly while turning the key gently.

**Never push in the key, turn it to "LOCK" and remove it when the vehicle is moving,** as this will lock the steering wheel and result in loss of steering control. If you must turn the engine off while the vehicle is in motion, turn the key only to "ACC". ***Never push in the key and remove it.***

## Combination headlight, dimmer and turn signal switch



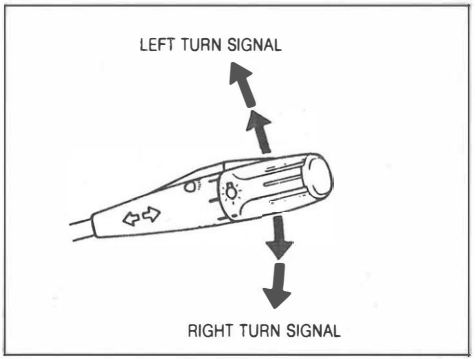

**To turn the lights on, twist the knob on the end of the lever.**




**For high beam, push the lever forward. Pull it back for low beam. For the headlight flasher, pull it further back.**

A blue light on the dashboard indicates high beam.

The headlight flasher works even when the headlight switch is off.




**For signalling turns, move the switch up or down.**

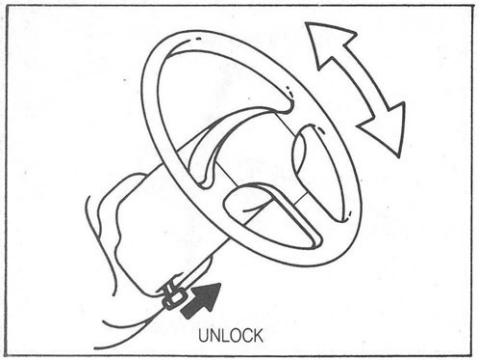
The switch has two signalling functions, turn signalling and lane changing signalling.

Turn signalling: A turn signal is given by moving the signal switch up or down as far as its movement will allow.

Lane change signalling: To signal a lane change, apply a gentle up or down pressure to the switch.

Signalling will cease once your hand is taken from the switch.

## Tilt steering wheel (if fitted)

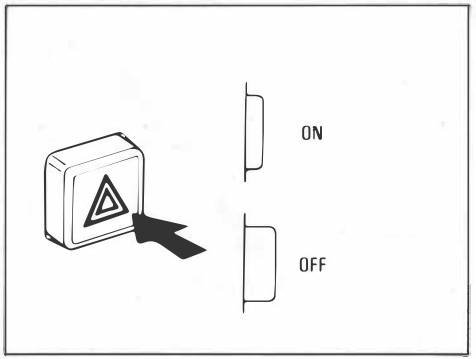



**To change the steering wheel height, pull up the lock release lever, tilt the steering wheel to the desired height and release the lever.**

After adjusting the steering wheel, try moving it up and down to make sure it is locked in position.

***Never make this adjustment while the vehicle is moving.***

## Emergency flasher switch




**To turn on the emergency warning lights, push the switch in. To turn them off, push the switch a second time.**

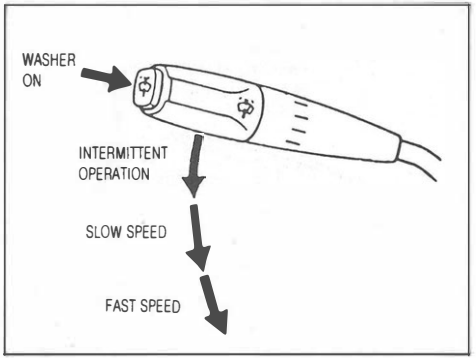
All the turn signal lights will flash. The emergency warning lights will work with the engine running, or off, without the ignition key.

Turn on the emergency flashers to warn other drivers if your vehicle must be stopped where it might be a traffic hazard.

***Always pull as far off the road as possible.***

The turn signal lights will not work when the emergency flashers are operating.

## Windshield wiper and washer switch




**To turn the wipers on, pull the switch down. To operate washers, push the button on the end.**

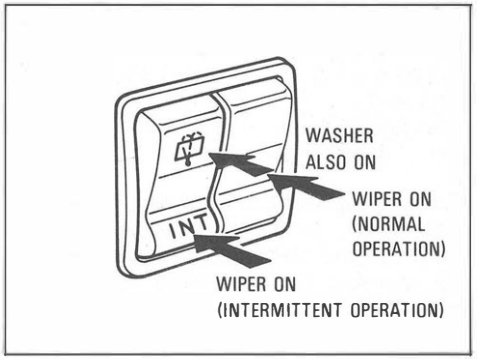
Do not run the wipers if the windshield is dry. It may scratch the glass.

If the washer does not work, check the amount of fluid in the tank under the hood.

In cold weather, warm the windshield with the defroster before using the washer. This will help prevent icing, which would block your vision.

*Note: Also see 'Adding washer fluid' Section 7.*

## Rear window wiper and washer switch — Models with luggage compartment door




**To turn the rear wiper and washer on, push the switch.**

If the washer does not work, check to see whether the washer tank is empty. For information on adding washer fluid, see "Adding washer fluid" in Section 7.

Do not operate the wiper if the rear window is dry. It may scratch the glass.

## Warning Indicators

| ITEM No | IF LIGHT OR BUZZER COMES ON | DO THIS— |
|---|---|---|
| 1 | **BRAKE** | Stop and check<br>Release parking brake |
| 2 | | Close all doors |
| 3 | | Stop and check |
| 4 | | Fill up the tank |
| 5 | | Stop and check |
| 6 | Light-reminder buzzer | Turn off lights. |

*See Paragraphs opposite for explanation of each item number

### 1. Brake system warning light

This light has the following functions:

**Parking brake reminder**
If this light is on, make sure the parking brake is fully released. The light should go off.

**Low brake fluid level warning**
If the light comes on when you press the brake pedal.

- **Slow down and pull off the road.** Half of the Holden tandem braking system has low fluid pressure (see "Braking Tips" page 47). The other half of the system will keep working, but stopping distance and pedal effort will be increased.
- **At a safe place, test your brakes by starting and stopping.** If you judge that the brakes still work adequately, drive cautiously to your nearest Holden Dealer or garage for repairs. If the brakes are not working, have the car towed in for repairs.

***Note: Special towing methods are required for vehicles equipped with automatic transaxles (see Section 4, page 62).***

**Continued normal driving is dangerous.** Get the brakes repaired immediately.

*continued overleaf*

**2. Open door warning light**

This light remains on until all the doors are completely closed.

**3. Discharge warning light**

This light indicates that the battery is being discharged. If it comes on while you are driving, ***stop*** the vehicle, turn off the engine and check for the cause. Look first at the drive belt (alternator belt). If it is loose or broken, the alternator will not charge the battery properly. If the belt is all right, there is a problem somewhere in the charging system. The engine ignition will continue to operate, however, until the battery is discharged. Turn off the air-conditioner, blower, radio, etc., and drive directly to the nearest Holden Dealer.

***Do not continue driving if the drive belt is broken or loose.*** The engine will overheat.

**4. Low fuel warning light**

This light indicates that the fuel tank is nearly empty.

**5. Low oil pressure warning light**

This light indicates that the oil pressure is low. If it flickers or stays on while driving, **pull off the road immediately and stop the engine.** First check the oil level, it may be low. If the level was low but adding oil does not cause the light to go out when the engine is restarted, turn it off immediately and call a Holden Dealer for assistance.

***Do not drive the car — even for a very short distance — until the cause is fixed.*** It may ruin the engine.

The light may occasionally flicker when the engine is **idling** or it may come on briefly after a hard stop. There is no cause for concern if it then goes out when the engine is accelerated slightly. However, you should check the oil level at your next opportunity because it may be low.

**6. Light reminder buzzer (SLE Model)**

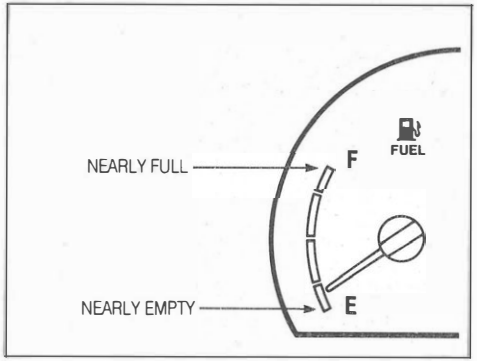
The buzzer sounds as a reminder if the headlights are left on when the ignition key has been turned to "LOCK" position and the door is opened.

**How to check all the warning lights (except the low fuel level warning light):**

1. Apply the parking brake.
2. Test the door open warning light by opening and closing the side doors.
3. Turn the ignition key to "ON" but do not start the engine. The battery charge, park brake and oil pressure warning lights should show.
4. Turn the ignition key to "START", the brake system warning light should light up briefly and then go out when the engine fires. As soon as the engine is running, the following lights should go out: Battery charge warning and oil pressure warning.

***If a warning light fails to illuminate, the bulb needs to be replaced or there is something wrong with the circuitry. Have the warning light checked as soon as possible.***

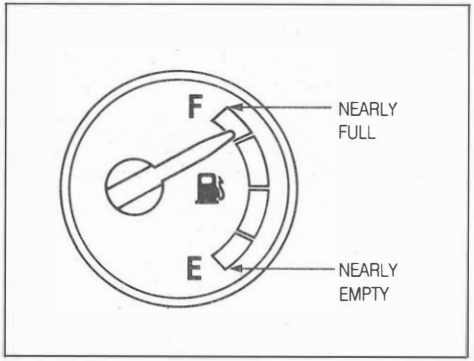
## Fuel gauge — SL and SLX Models



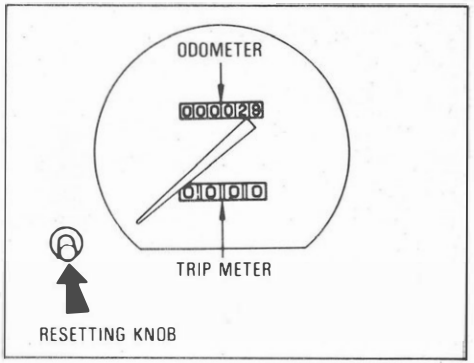

***The gauge works when the ignition switch is on and indicates approximate quantity of fuel remaining in the tank.***
*The needle moves when braking, accelerating or making turns. This is caused by the movement of the fuel in the tank.*

***Do not drive with the fuel level below the "E" or with the low fuel level warning light on. It may cause engine misfire, and damage to the catalytic converter.***

## Fuel gauge — SLE Model



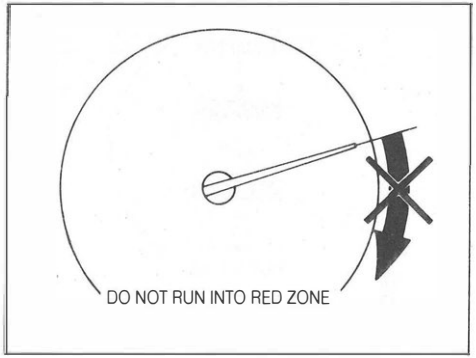

## Odometer and trip meter




**The odometer records the total distance the car has been driven. The trip meter may be set to record the distance on each trip. To set the trip meter, press the knob in and release it.**

White digits on black background indicate kilometres travelled and black digits on a white background indicate tenths of kilometres travelled.

## Tachometer (if fitted)

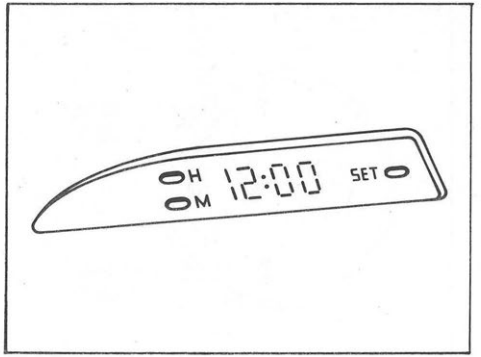



**The tachometer indicates how many thousands of revolutions per minute (rpm) the engine crankshaft is rotating (engine speed) when the engine is running.**

Tachometer readings may be used for the following:

1. To obtain the most favourable rpm for gear changing.
2. To select the most fuel efficient engine rpm.
3. *Do not run the needle into the red zone. This may cause severe engine damage.*

## Clock (if fitted)




**The digital clock indicates the time with the ignition key at the "ACC" or "ON" position.**

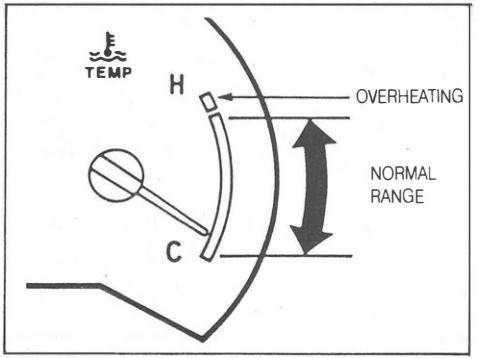
When the tail lights are turned on, the brightness of the time indication will be reduced.

**To reset the hour,** depress the "H" button.

**To reset the minute,** depress the "M" button.

**To adjust the time to an even hour,** depress the "SET" button. For example, if the button is depressed when the time is between 1:01 — 1:29, the time will change to 1:00 if the time is between 1:30 — 1:59, the time will change to 2:00.

## Engine temperature gauge — SL and SLX Models



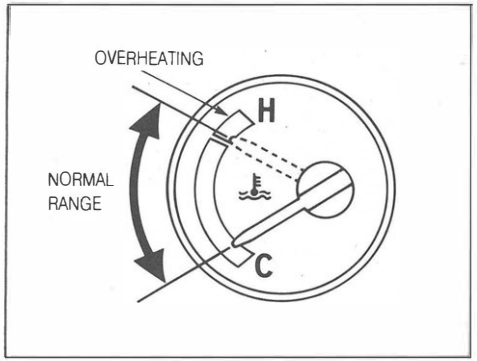

**If the needle points to the red zone or higher, stop your car and allow the engine to cool.**

The gauge indicates the engine coolant temperature when the ignition switch is ON.

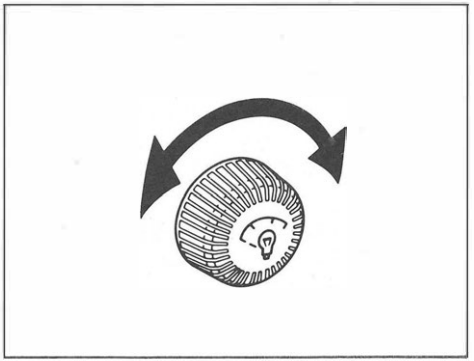
The engine operating temperature will vary with changes in weather and engine load. (If your car overheats, see Section 4).

***Do not continue driving with the engine overheated.***

## Engine temperature gauge — SLE Model

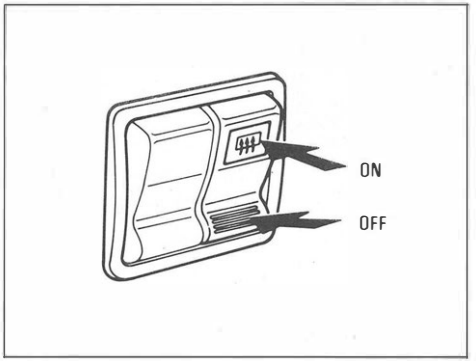



## Instrument panel light control



**To adjust the intensity of the instrument panel lights, rotate the rheostat control.**

## Rear window defogger switch



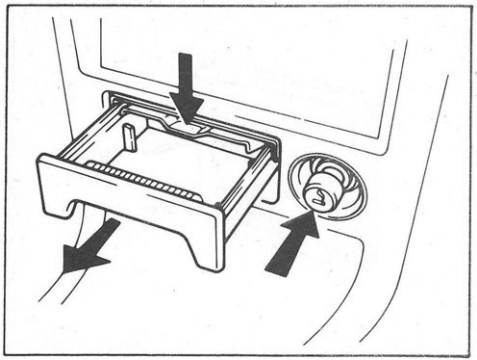

**Push the defogger switch to clear condensation from the rear window. Use defogger only when engine is running.**

The thin heater wires on the inside of the rear window will quickly clear the glass.

***When cleaning the windows inside, be careful not to scratch or damage the heater wires on the rear window. Refer to Section 5, for type of cleaner that can be used.***

Always turn the switch off as soon as the rear window is clear. Continuous use may cause the battery to discharge, especially during stop-and-go driving. The defogger is not designed for drying rain water or for melting snow.

## Cigarette lighter and ashtray



**To operate the cigarette lighter, press it in. When it becomes heated, it automatically pops out ready for use.**

If the engine is not running, the key must be in the "ACC" position.

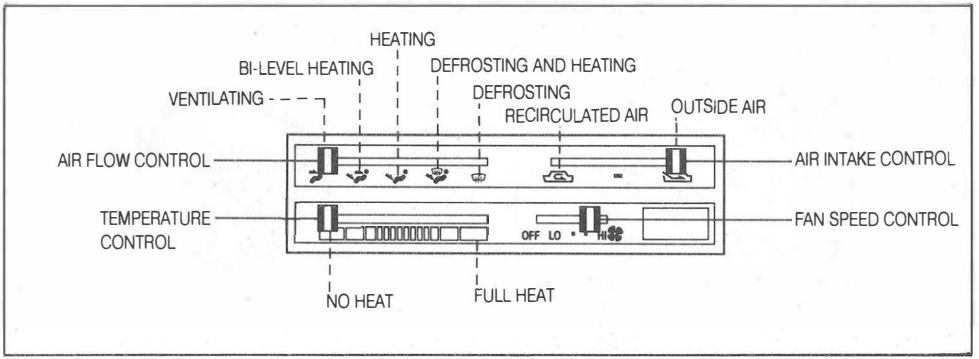
Do not hold the cigarette lighter pressed in.

***After using the ashtray, push it back in completely.*** If not, the flame of a cigarette may cause other cigarette butts to burn, resulting in a fire.

To remove the ashtray, press down on the protector and pull out.

Use a Holden genuine cigarette lighter or equivalent for replacement.

## Heater controls




Operation of the four controls is simple:

- The **air intake control** is used to select either fresh air from outside or recirculated air.
- The **air flow control** is used to select the air flow outlet (to the floor, to the dashboard vents, or to the windshield).
- The **temperature control** is used to adjust the temperature.
- The **fan speed control** is used to turn the fan on and off and to select one of the four fan speeds.

### HEATING

- Move the **air intake control** to the OUTSIDE AIR position for *normal* heating or to the intermediate position for *faster* heating. For quickest results, move the control to the RECIRCULATED AIR position. Remember, however, that the faster setting you use, the easier the windows will fog up.
- Move the **air flow control** to the HEATING position. This directs most of the air to the floor outlets. When the outside air temperature is low and the windows fog up easily, move the control to the DEFROSTING AND HEATING position. When setting the air flow control at the OUTSIDE

AIR position, unheated outside air flows from the centre vents at any position of the temperature control.

- Adjust the **temperature control** for the most comfortable setting. The FULL HEATING position gives maximum heating.
- Turn on the **fan speed control.**

### BI-LEVEL HEATING

This is a heater setting in which there is a temperature difference between the air from the dash outlets and the air from the floor outlets.

- Move the **air intake control** to the OUTSIDE AIR position.
- Move the **air flow control** to the BI-LEVEL HEATING position. This divides the air flow between the dashboard vents and the floor outlets with the air from the floor outlets slightly warmer than that from the dashboard vents. The temperature difference varies from one temperature setting to another.
- Adjust the **temperature control** for the most comfortable setting.
- Turn on the **fan speed control.**

### VENTILATION

- **Move the air intake control** to the OUTSIDE AIR position.
- Move the **air flow control** to the VENTILATING position. This directs all the air to the dashboard vents.
- Adjust the **temperature control** for the most comfortable setting.
- Turn on the **fan speed control.**

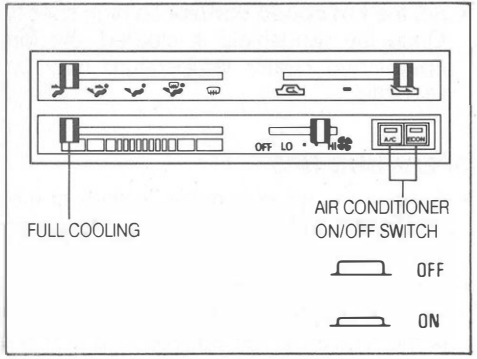
### DEFROSTING OR DEFOGGING

- Move the **air intake control** to the OUTSIDE AIR position.
- Move the **air flow control** to the DEFROSTING position. This directs most of the air to the windshield outlets and side vents. On vehicles with side defroster outlets, the air also flows to the side windows. For quick windshield defrosting or defogging, close the side vents.
- When setting the air flow control at the OUTSIDE AIR position, unheated outside air flows from the centre vents at any position of the temperature control.
- Move the **temperature control** to the middle or the FULL HEATING position. The FULL HEATING setting will give the fastest results.
- Set the **fan speed control** on high speed. Once the windshield is cleared, the fan speed and heater temperature may be reduced.

### OPERATING TIPS

- Be sure the air inlet grilles in front of the windshield are not blocked by leaves or other obstructions.
- When driving on dusty roads, close all windows and position the air intake control at the OUTSIDE AIR position and turn on the fan speed control.
- If following another vehicle on a dusty road, or driving in windy and dusty conditions, it is recommended that the air intake control be temporarily set to the RECIRCULATED AIR position, which will close off the outside passage and prevent outside air and dust from entering the vehicle interior.

## Air conditioner controls




### Air conditioner on-off switch

This is the only visible control added to the heater when your vehicle is equipped with air conditioning. When the air-conditioner is operating there will be a slight increase in fuel consumption. The most economical way to operate the unit, is to first set the heater controls to your requirement. Press the "A/C" button and when the desired room temperature has been reached, press the "ECONOMY MODE" button. Should you want to decrease the room temperature, press the "A/C" button again. To turn off the unit, push whichever switch is illuminated.

If the indicator light flashes, contact your Holden Dealer as soon as possible. There may be a slippage of the drive belt or a trouble in the compressor. If this happens, the air conditioner is automatically turned off to avoid damage to the drive belt.

### COOLING

- Push on the **air conditioner on-off switch.**
- Move the **air intake control** to the OUTSIDE AIR position for *normal* cooling or to the RECIRCULATED AIR position for *faster* cooling.
- Move the **air flow control** to the VENTILATING position.
- Adjust the **temperature control** for the most comfortable setting. The FULL COOLING position gives maximum cooling.
- Turn on the **fan speed control.** Medium or high speed works best.

### DEHUMIDIFIED HEATING

- Push on the **air conditioner on-off switch.**
- Move the **air intake control** to the OUTSIDE AIR position.
- Move the **air flow control** to the HEATING position.
- Turn on the **fan speed control.** Medium or high speed works best.
- Adjust the **temperature control** for the most comfortable setting.

### VENTILATION (NO COOLING), HEATING, DEFROSTING OR DEFOGGING

- Push off the **air conditioner on-off switch.**
- Use all the controls in the same way as described in "Heater controls".

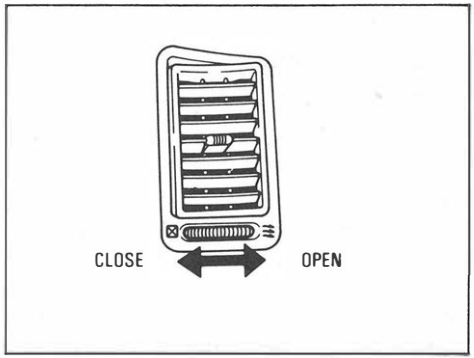
### OPERATING TIPS

- After parking in the hot sun, drive for the first few minutes with the windows open. After the excess heat has blown away, close the windows to keep out hot air.
- For best cooling efficiency, keep the windows closed.
- Move the air intake control to the OUTSIDEAIR position for normal air conditioning. For maximum cooling, place the control in the RECIRCULATED AIR position. However, since this does not allow fresh air to enter the vehicle, move

the control to the OUTSIDE AIR position from time to time to change the air in the vehicle.

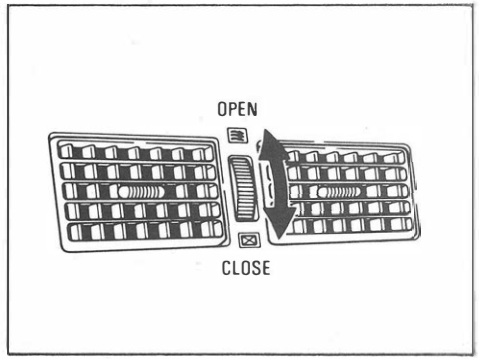
- In extremely humid weather, do not place the air flow control in the DEFROSTING position during cooling operation. The difference between the temperature of the outside air and that of the windshield could cause the outer surface of the windshield to fog up, blocking your vision.
- On long uphill drives, the additional load of the air conditioner may cause engine overheating. Watch the engine temperature gauge carefully. If the gauge indicates overheating, turn the air conditioner off.
- See also "Operating tips" in "Heater controls" on previous page.

## Side vents



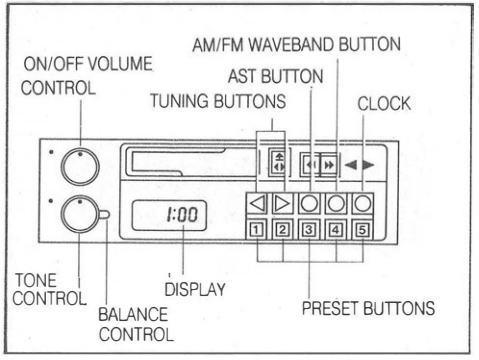

**The side vents may be opened or closed as shown.**

## Centre vents




**The centre vents may be opened or closed as shown.**

## Radio — SLX Model




**The radio in the SLX Nova, which incorporates a clock, is operated as follows.**

Note: Operation of the radio buttons is followed by a beep to signal that the radio will execute the command given.

### On/Off-Volume control

Switch the radio on with the ON/OFF-VOLUME control knob and adjust the volume. The DISPLAY will show:

- the wave band: FM or AM
- the frequency
- the indication STEREO
- the preset number (e.g. P1) if the previous operation was in preset mode — see "Programming"
- the indication AST if the previous operation was in AUTOSTORE mode

### Wave range

Select the desired wave band by pressing the AM/FM button one or more times until DISPLAY shows the desired band.

### Manual and automatic tuning with up and down buttons

### Operation

The tuning operation depends on the time interval between pressing and releasing one of the buttons

- button pressed less than 0.2 sec.:
  ***one-step manual tuning,***
- button pressed between 0.2 and 2 sec.:
  ***automatic tuning,***
- button pressed longer than 2 sec.
  ***continuous manual tuning.***

### One-step manual tuning

Press one of the TUNING buttons for less than 0.2 sec. When releasing the button, a beep will be heard. One short touch means a single step change in frequency up or down, depending on the button pressed. One single step is 50 kHz for FM and 9 kHz for MW.

### Automatic tuning

- Press one of the TUNING buttons for more than 0.2 sec. but less than 2 sec.
- Release the button and you will hear a beep.

Now automatic search tuning starts. A station will be received after a short searching period. Repeat the operation and you will receive the next station in the direction of search.

### How automatic search tuning works

Search tuning occurs at two sensitivity levels. Searching is started at the low sensitivity level where only strong transmitters are detected. Furthermore, automatic search tuning always starts from the frequency to which the radio was set. Once activated, the radio scans the band looking for strong transmitters. If a transmitter is found, the search process is stopped.

If no strong transmitters are found when the

highest or lowest frequency is reached, the radio switches over to the high sensitivity level so that weaker stations can be detected, and searching is continued.

*Note:* Search tuning is stopped if:

**a.** a transmitter is found,

***b.*** another button is pressed,

***c.*** the radio is switched off.

### Continuous manual tuning

Keep one of the TUNING buttons pressed for more than 2 sec. signalled by a beep.

The frequency will change at high speed and this will continue as long as the TUNING button remains pressed. Continuous fast tuning stops when the TUNING button is released. At the moment the highest frequency is reached, the tuning switches automatically to the lowest frequency and vice versa. The search tuning continues from there.

### Station preset buttons (P1 to P5)

### Programming

1. Select the wave band with the AM/FM button
2. Tune accurately to the desired station by means of:
   - **a.** One step manual tuning
   - ***b.*** Automatic tuning
   - ***c.*** Manual continuous tuning
3. The tuned station is programmed as follows: Press the desired PRESET button (e.g. P1) until a double bleep is heard and DISPLAY shows '-S-'. Then the station frequency has been stored in the preset. When the button is released, the DISPLAY shows the wave band, the frequency and the preset number to which the station has been programmed.
4. Programme the other PRESET buttons in the same way.
5. For the other wave band(s) repeat the operation described above.

### Operation (Recall of stations)

After the radio has been programmed you only need to:

1. Press the AM/FM button to select the desired wave band.
2. Press one of the PRESET buttons to recall the desired station.

### Autostore

Autostore is an extended and automatic search tuning system on four sensitivity levels. The radio can store automatically either five additional FM stations or five additional AM stations.

All other stations programmed on the normal presets (for each band) will not be erased.

This is a highly convenient feature when travelling outside your normal area. You may automatically select the strongest stations in this strange area without knowledge of their frequencies.

### Programming by autostore

1. Select the desired wave band with AM/FM button.
2. Press the AST button for more than 2.5 sec to start the autostore programming mode.

   You hear a beep and the AST indication on the DISPLAY starts flashing. Now the radio is muted, the frequency band is being scanned and the strongest five stations are automatically programmed on the five preset buttons. This is done in the order of their signal strength. The programming action in the actual frequency band is finalized with a bitonal beep and you hear the strongest station programmed on PRESET button P1.

*continued overleaf*

3. Repeat steps 1. and 2. if you want to programme another wave band.

**Notes:**

**1.** If under certain circumstances it is not possible to find five stations, the remaining preset buttons (e.g. P4 and P5) will be programmed with the highest frequency in the band (108 MHz for FM or 1602 kHz for AM).

**2.** *Auto-replace:* If a station stored on a PRESET button (e.g. P4) is not desired, you can store the next strongest station (other than the five stations already stored) by pressing that PRESET (e.g. P4) until the AST indicator starts flashing. The scan procedure is started again and the next strongest station replaces the previous station in that PRESET (e.g. P4). If no other station is found, the previous station in the PRESET remains unchanged.

**Operation of autostore**

1. Select that wave band where the autostore presets have been programmed previously.
2. Press briefly, the AST button.
3. Release the button within 2.5 sec.

   You will hear a beep and the display will show 'AST'. Autostore operation mode is entered and the station last used appears.

**Switching from autostore mode to normal mode**

The radio can be switched from autostore mode to normal mode in two ways:

1. Press the AM/FM button.

   The AST indication disappears and you hear the station last selected in normal mode of the same band.
2. Press one of the TUNING buttons.

   The radio switches to normal mode (in the same wave band) with the frequency or station remaining unchanged.

**How to transfer autostore presets to normal presets**

The radio offers the possibility of transferring one or all autostore stations to normal presets.

1. Transferring one station:

- Select the wave band that has been programmed by autostore.
- Press AST button; last station is heard.
- Select that AST preset station you like to transfer (e.g. P2).
- Press briefly (less than 0.2 sec.) one of the TUNING buttons (UP or DOWN).

  The radio switches to normal tuning mode while the frequency of the AST station is maintained.
- Press one of the preset buttons for longer than 2.5 sec. Now the station is also programmed on the normal preset.

2. Transferring of all five stations

- Switch the radio off.
- Then keep AST button pressed when switching on the radio.

  All autostore preset stations are transferred and automatically programmed on the normal presets.

## Clock — SLX Model

### Stereo/Mono

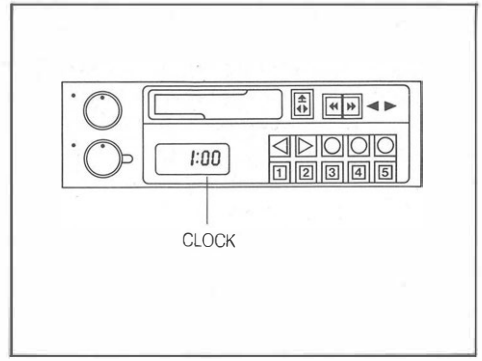
When the FM band is selected, the radio is always in the stereo mode. If the signal decreases your receiver automatically and gradually changes over to monaural reception.

### Tone control

Adjust the low and high notes with the TONE CONTROL knob.

### Balance control lever

Adjust the balance between left and right hand speakers by moving the BALANCE CONTROL lever up or down.




### SLX Model clock operating descriptions and setting procedure.

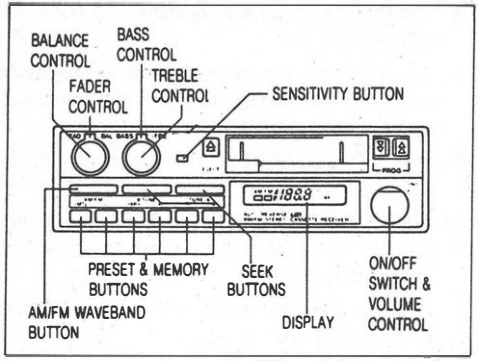
The clock is incorporated in the radio display. The clock illuminates when the ignition is either off, or on. However, the time is not displayed for a period of 10 seconds each occasion the radio is turned on or a new station is selected. For that brief period, only the frequency of the chosen programme will be displayed.

To set the clock:

1. Switch off the set.
2. Press the CLOCK button and whilst keeping it pressed, switch on the radio.
3. Release the CLOCK button (the minutes will blink).
4. Adjust the minute digits by either pressing the UP or DOWN button until the required setting is obtained.
5. Press the CLOCK button again (the hour digits will blink).
6. Adjust the hour digits by either pressing the UP or DOWN button as done when setting the minutes.

   Note: In the PM mode, a P will be shown on the DISPLAY.
7. Should the minute digits need further adjustment after setting the hours. Press the CLOCK button again and reset the minutes as described in 4 above.
8. Switch off the set. The seconds will reset to 00 and normal clock operation will commence.

## Radio — SLE Model




**The SLE Model Nova has a radio equipped with an electronically tuned combination radio and tape playing unit.**

### On-off switch

Push the ON-OFF control knob once to turn on the radio, push the knob again to turn off the radio.

### Volume control

Adjust the volume by rotating the VOL (volume) control knob.

### Station selection

Before tuning into a radio station, first turn on the radio and choose a waveband by pressing the AM/FM button. If an AM band has been selected, AM will be displayed on the DISPLAY. Should AM be displayed when the FM band is desired, press the AM/FM button a second time. The FM band will then be obtained and FM will show on the DISPLAY.

### Tune seek V Λ buttons — manual tuning

In limited reception areas, manual tuning may be necessary. To do this, simply press the Λ or V buttons to progress the scale.

Each press of the buttons will change the DISPLAY by a predetermined amount (for FM, 0.1 MHz and for AM, 9kHz). When manual tuning, the button depressing time should always be less than 0.5 seconds otherwise the unit will change to the automatic seek mode — see "Seek tuning".

### Seek tuning

To seek stations automatically, maintain finger pressure on either the V or Λ buttons (depending on the station desired) until a "beep" is emitted from the radio. The radio will then tune into the next station.

### Station preset and memory buttons

Twelve stations can be set on the PRESET MEMORY buttons, six AM and six FM. To preset AM stations:

1. Press the AM/FM waveband button so that the AM waveband is registered on the DISPLAY.
2. Obtain the desired radio station by pressing the necessary TUNE/SEEK button.
3. Press the number 1 PRESET MEMORY button until a beep is heard. The displayed radio station will then be retained in the memory of that button. Five other AM radio stations can be preset in the same manner.

To preset FM stations select the FM waveband and proceed in the same manner.

### Bass control

The BASS CONTROL is positioned behind the TREBLE CONTROL knob. To alter the bass, rotate the BASS CONTROL clockwise or anti-clockwise until the desired sound is obtained.

It will be noticed whilst rotating the control, that a slight resistance will be felt at one point. This indicates the centre position.

### Treble control

The TREBLE CONTROL is in front of the BASS CONTROL, it is similarly operated.

### Sensitivity (SENS) button

To increase reception sensitivity, push the SENS button in. This additional boost will assist seeking weak FM broadcasts during station searching. Another push will discontinue the sensitivity mode.

### Balance control

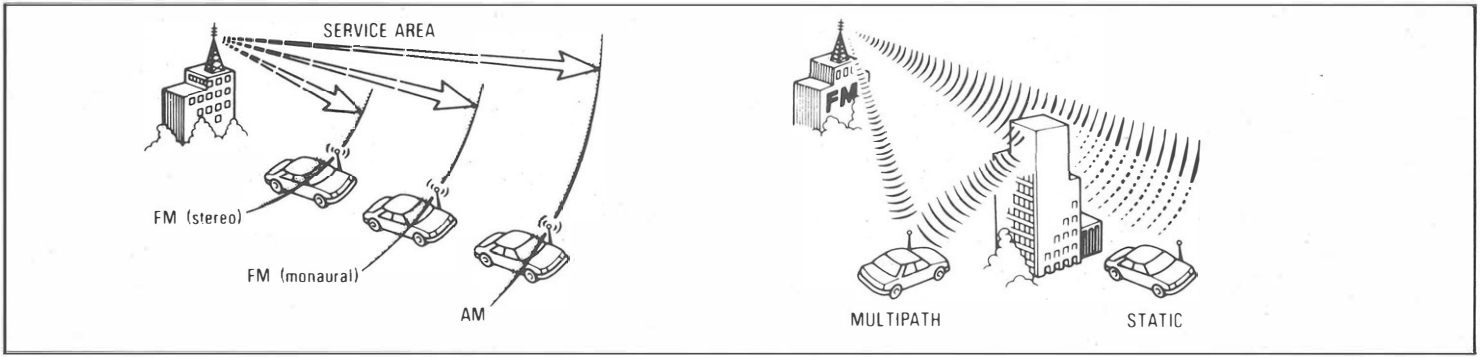
Rotate the BALANCE CONTROL clockwise or anti-clockwise to adjust the speaker balance to your liking.

A slight rotational resistance will be noticed at one point when turning the control, this indicates that the control is centralised.

### Fader control

Rotate the control to alter the sound balance (front to rear) as desired.

## Radio reception




### Antenna

Adjust the length of your antenna for best reception. Usually a short length is best in large cities and a fully extended antenna is best for distant reception.

***To prevent damage to the antenna, make sure it is retracted before running your vehicle through an automatic car wash.***

### FM reception tips

A vehicle is not an ideal place to listen to a radio. Because it moves, reception conditions are constantly changing. Buildings, terrain, signal distance and noise from other vehicles are all working against good reception. Some conditions of FM may appear to be problems when they are not. The following characteristics are completely normal for a given reception area, and they do not indicate any problem with the radio itself.

- **Fading and Drifting:** FM range is limited to about 40 kilometres, except for some high power stations.

  If a vehicle is moving away from the desired station's transmitter, the signal will tend to fade and/or drift. This is a more remarkable phenomenon than with AM, and is accompanied by distortion.

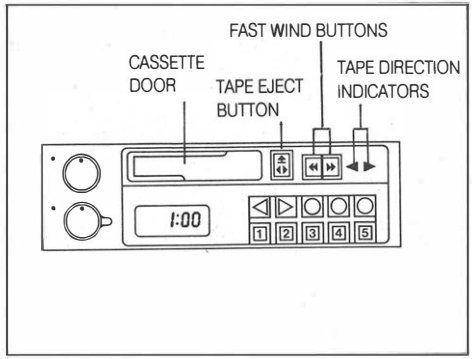
  Fading and drifting can be minimized to a certain degree by careful attention to fine tuning, or you should retune the radio to a stronger signal.

- **Static and Fluttering:** When the line-of-sight link between a transmitter and vehicle is blocked by large buildings or the like, the radio sound may be accompanied with static or fluttering because of the characteristic of FM. In a similar effect, a fluttering noise is sometimes heard when driving along a tree-lined road.

  This static and fluttering can be reduced by adjusting the tone control for greater bass response until the disturbance has passed.

- **Multipath:** Because of the reflecting characteristics of FM, direct and reflected signals may reach the antenna at the same time (multipath) and cancel each other out. As a vehicle moves through these electronic dead spots, the listener may hear a momentary flutter or loss of reception.
- **Station swapping:** When two FM stations are close to each other, and an electronic dead spot, such as static or multipath area, interrupts the original signal, sometimes the stronger second signal will be selected automatically until the original one returns. This swapping can also occur as you drive away from the selected station and approach another station of a stronger signal.

## Stereo cassette player — SLX Model




**Switch on the cassette player by inserting a cassette**

### Playback

- Hold the cassette with the open side to the right and the full reel towards you.
- Insert the cassette into the CASSETTE COMPARTMENT until EJECT button springs forward. Playback starts automatically and the radio is muted. The direction of playback is shown by one of the TAPE DIRECTION INDICATORS.

### End of the tape

At the end of the tape the playback will be continued in the reversed direction, which is shown by the opposite TAPE DIRECTION INDICATOR.

### Playback stop

The cassette player can be stopped by pressing the TAPE EJECT/REVERSE button fully home. Now the radio programme will continue. The cassette comes free from the tape transport mechanism and is ejected.

### Reverse

Press the TAPE EJECT/REVERSE button halfway if you want to change the direction of the playback **before** the tape end.

The other tape DIRECTION INDICATOR will illuminate to indicate the opposite playback direction.

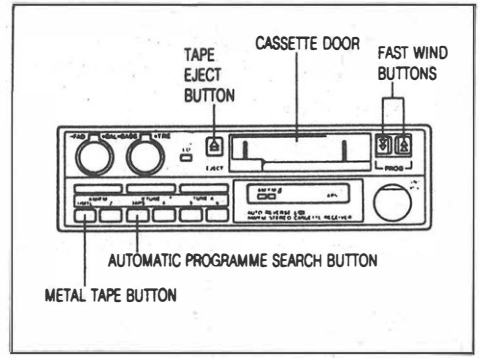
### Fast forward wind or rewind

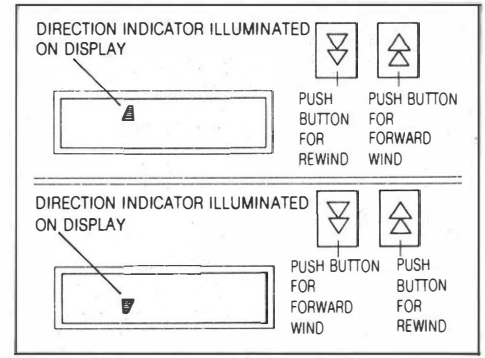
To fast forward wind, press the relevant FAST WIND button into a locked position of which the small triangle markings point in the same direction as the tape DIRECTION INDICATOR.

Conversely, to rewind, press the FAST WIND button pointing in the opposite direction to the tape DIRECTION INDICATOR.

*continued overleaf*

## Stereo cassette player — SLE Model





DIRECTION INDICATOR ILLUMINATED ON DISPLAY
PUSH BUTTON FOR REWIND
PUSH BUTTON FOR FORWARD WIND
DIRECTION INDICATOR ILLUMINATED ON DISPLAY
PUSH BUTTON FOR FORWARD WIND
PUSH BUTTON FOR REWIND

At the end of the tape the auto-reverse mechanism automatically reverses the tape direction and playback will be continued.

### Fast wind stop

Fast forward and rewind operation can be stopped before the end of the tape by pressing slightly the other FAST WIND button which was not activated. Now cassette playback is resumed.

### Important note

To obtain the best results from your cassette player, it is recommended only C60 or C90 tape cassettes be used.

Do not leave a cassette in the player when not in use.

It is recommended the tape head in the player be cleaned periodically using a special head-cleaning cassette, available from most cassette retailers.

### Tape direction indicator

Because the radio is off, the DISPLAY will show the direction the tape is playing (see illustration "Fast wind buttons") and the type of tape selected, instead of wavebands and wavelengths (normal bias or metal).

### Fast wind buttons

There are two FAST WIND BUTTONS, their function depend on the direction the tape is being played.

- **Upper tape DIRECTION INDICATOR illuminated on DISPLAY — see illustration "Fast wind buttons".**

  1. To fast rewind tape back to start of programme, push the left hand FAST WIND BUTTON.
  2. To wind the tape fast fast forward, push the right hand FAST WIND BUTTON.

- **Lower tape DIRECTION INDICATOR illuminated on DISPLAY**

  3. To fast rewind tape back to start of programme, push the right hand FAST WIND BUTTON.
  4. To wind the tape fast forward, push the left hand FAST WIND BUTTON.

### Programme change

When one side (programme) of the cassette has been played, the player will automatic-

ally play the other side, starting from the beginning of the programme. To change the programme when part of one side of the cassette has been played, press both FAST WIND BUTTONS simultaneously about half way in. To revert to the original programme, press the FAST WIND BUTTONS a second time.

### Automatic programme search button

The automatic programme search is a function that detects unrecorded blanks between tape tracks and consequently, locates the start of a track when a tape is being fast wound in either direction.

To fast wind a running programme and listen to the next track from the start:

1. Press the AUTOMATIC PROGRAMME SEARCH button.
2. Press the FAST WIND BUTTON that has arrow heads pointing in the same direction as the one illuminated on the STATION INDICATOR.

To listen again to a track from the start.

1. Press the AUTOMATIC PROGRAMME SEARCH button.
2. Press the FAST WIND button that has arrow heads pointing in the OPPOSITE direction to that illuminated on the STATION INDICATOR.

### Metal tape button

When a metal or chromium dioxide tape cassette is to be played, press the METAL TAPE BUTTON so that the cassette player can accommodate the tape. Press the button a second time before reverting to a normal bias (low noise) tape cassette.

### Tape eject button

To eject a cassete, push in the TAPE EJECT BUTTON.

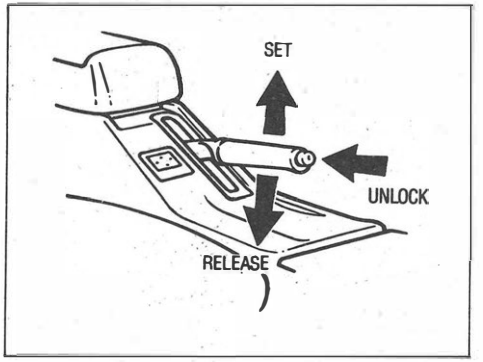
### Important note

To obtain the best results from your cassette player, it is recommended only C60 or C90 metal, chrome, or normal bias tape cassettes be used.

Do not leave a cassette in the player when not in use.

It is recommended the tape head in the player be cleaned periodically using a special head-cleaning cassette, available from most cassette retailers.

## Parking brake




**To set: Pull up the lever.**

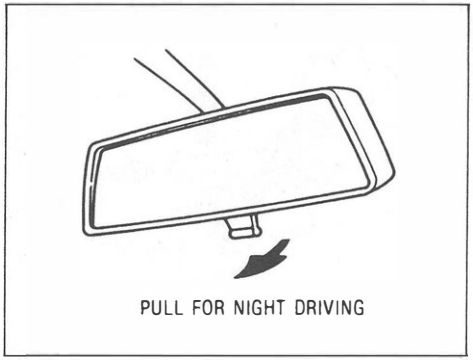
**To release: Pull up slightly, press the thumb button, and lower.**

Before leaving your vehicle, *firmly apply the parking brake*. For better holding power, first depress the brake pedal and hold it while setting the parking brake.

*When the vehicle is equipped with automatic transaxle, always apply the parking brake BEFORE moving the transaxle shift lever into PARK! Similarly, always move shift lever out of 'PARK' before releasing parking brake.*

***See "Warning Lights" Page 17***

## Day-night rear view mirror

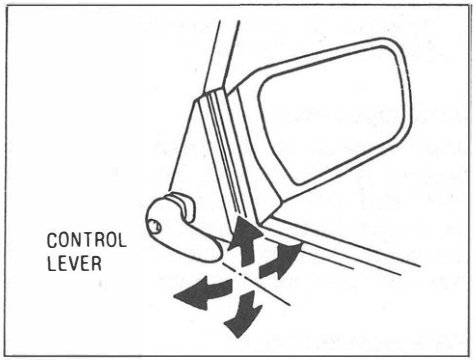



**Pull the lever backward to reduce glare from the rear vehicle headlights during night driving.**

Before adjusting the mirror to the position with most clarity, push the day-night change lever forward (daylight driving position).

***Remember that by reducing glare you also lose some rear view clarity.***

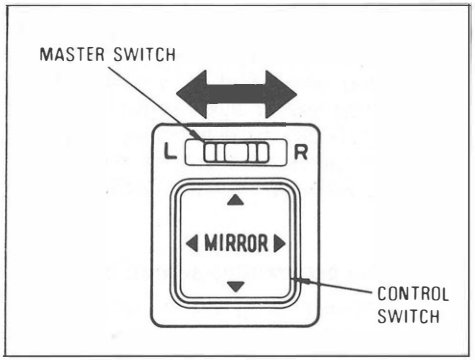
## Remote control rear view mirror




**To adjust the remote control rear view mirror, simply operate the control lever**

If ice should jam the mirror control, do not force the control lever or scrape the mirror face. Use a spray de-icer to free the control.

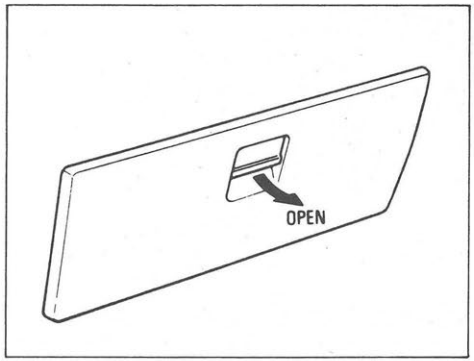
## Power rear view mirror control — SLE Model




**To adjust a power rear view mirror, first place the master switch at "R" (right) or "L" (left) depending on which mirror needs adjusting, then push the control switch on each direction.**

If ice should jam the mirror, do not operate the control or scrape the mirror face. Use a spray de-icer to free the mirror.

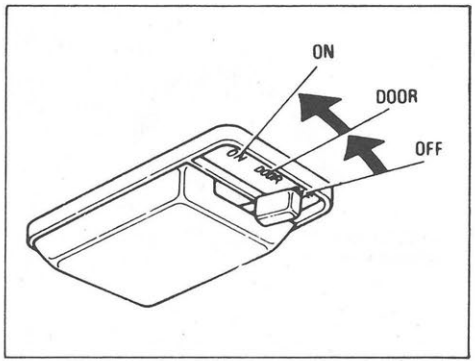
## Glovebox




**To open the glovebox door, pull the lever.**

It is advisable to keep the glovebox door closed whilst driving as it will reduce the chance of injury should the vehicle be involved in an accident or emergency stop.

## Interior light



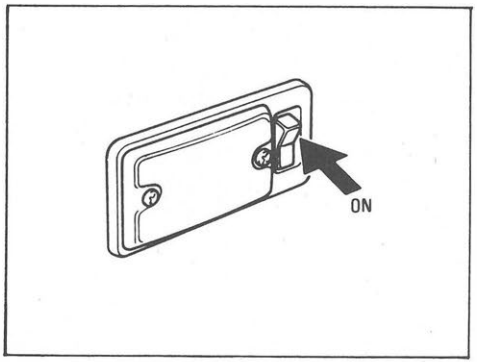

**The interior light switch has three positions.**

**"ON":** The light stays on with the door opened or closed regardless of any other switches.

**"DOOR":** The light comes on while any door is opened.

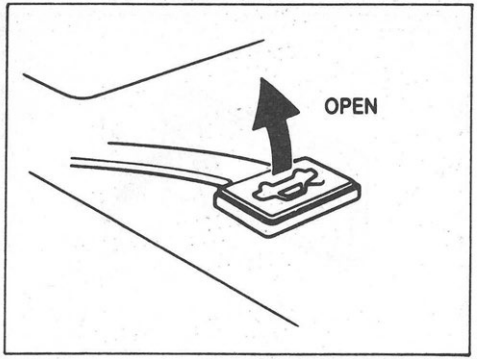
**"OFF":** The light remains off even with a door opened.

## Luggage compartment light — Hatchback Model




**To turn on the luggage compartment light, open the luggage compartment door and push the switch. The light will turn off automatically when the compartment door is closed.**

## Boot lid/luggage compartment door release lever

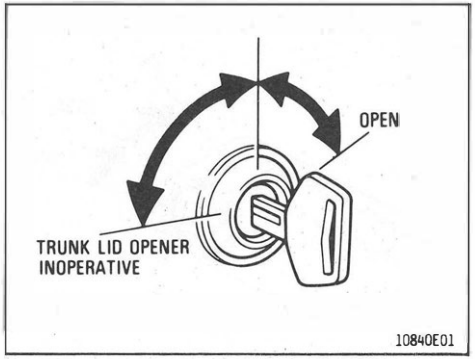



**Pull the boot lid/luggage compartment door release lever whilst sitting in the driver's seat.**

The boot lid/luggage compartment door can also be opened with a key.

The release lever is located in front, below, and to the right of the driver's seat.

## Boot lid

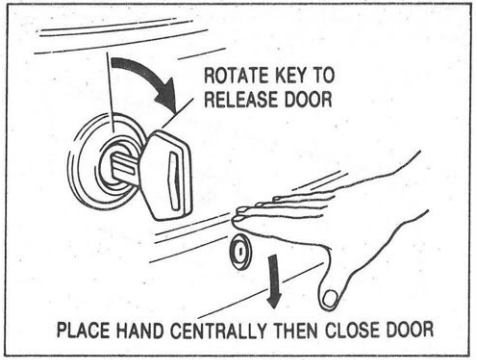



**To open the boot lid, insert the key and turn it clock-wise.**

To close the trunk lid, lower and press down on it. ***After closing the boot lid, try pulling it up to make sure it is securely closed.***

***Keep the boot lid closed while driving. This prevents exhaust gases from entering the vehicle (see page 42).***

## Luggage compartment door



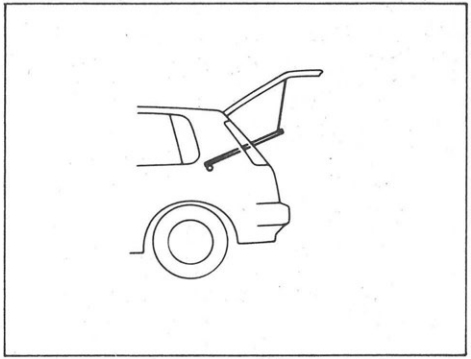

**Open the luggage compartment door by inserting the key and turning it clock-wise.**

The door will automatically open once it has been raised halfway.

To close the door, remove the key, place a hand centrally on the door and press downward until door is relocked.

***To safeguard against exhaust gas entry, always ensure that the compartment door is locked before driving your vehicle (see page 42).***

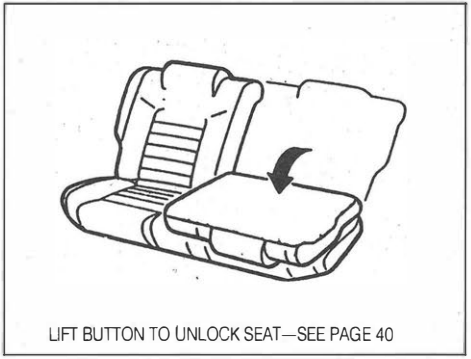
## Luggage cover — Hatchback



**HATCHBACK: Hook the cords to the back hatch. When you open the back hatch, the luggage cover will tilt up for easy access to the luggage area. For additional luggage space, lift it out of the retainers.**

*To prevent injury during sudden braking, do not place anything on the luggage cover.*

## Fold-down rear seat (type A)




**Unlock the seatback, and fold it down.**

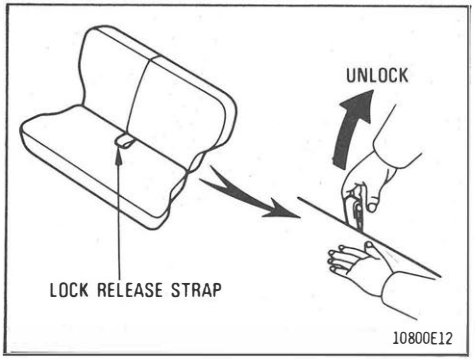
If desired, each seatback may be folded separately.

When returning the seatback to the upright position, make sure that it is securely locked by pushing forward and rearward on the top of the seatback, and that the seat belts are in position.

*Never allow anyone to ride in the cargo area. It is not designed for passengers. They could be injured in sudden braking.*

*To prevent luggage and packages from sliding forward during braking, do not stack any-thing in the cargo area higher than the seatbacks.*

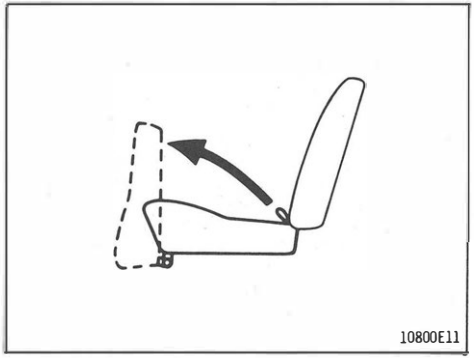
## Fold-down rear seat (type B) (seatback and bottom cushion)




**1. Pull the lock release strap.**

*continued overleaf*

## Fold-down rear seat—continued

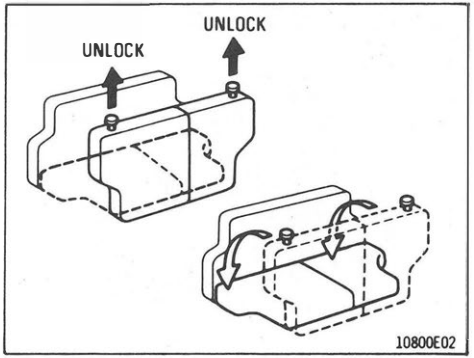



**2. Swing the bottom cushion up.**

It is hinged at the front edge, so just lift it up.

When returning the bottom cushion to its place, push the bottom cushion end at the lock release strap and make sure it is securely locked, by pulling the edge of the cushion near the lock release strap.

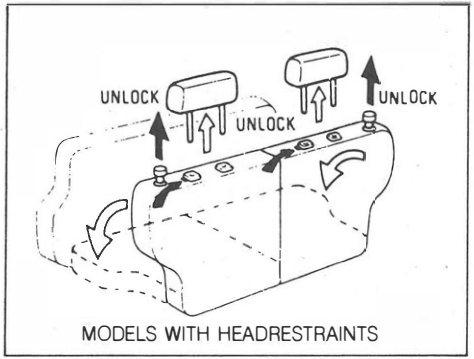
## Models without adjustable head restraints




**3. Unlock the seatback, and fold it down while pushing the bottom cushion forward.**

If desired, each seatback may be folded separately.

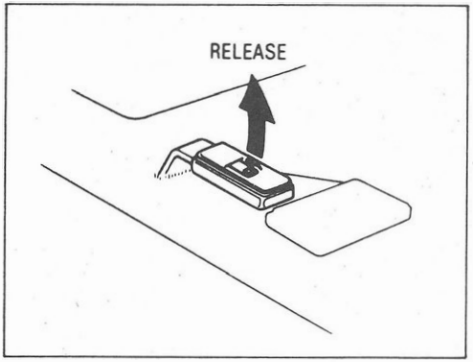
## Models with adjustable head restraints



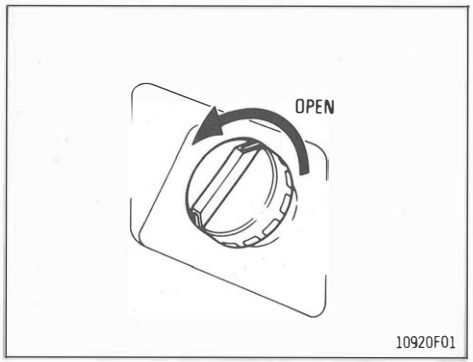

**Press the headrestraint lock release buttons and lift the head restraints from their respective seat backs before folding the seat backs forward.**

To revert to the normal passenger carrying capacity, reverse the seat folding and locking procedure. Once the seat backs and cushion are in position, check them to ensure that they are each locked firmly in place before driving the vehicle again. Also check that all the seat belt is accessible.

## Fuel filler door release — if applicable




**To open the fuel filler door while sitting in the driver's seat, pull on the release lever located next to the boot release lever.**




**2. To remove the fuel tank cap, turn the cap slowly counterclockwise, then pause slightly before removing it.**

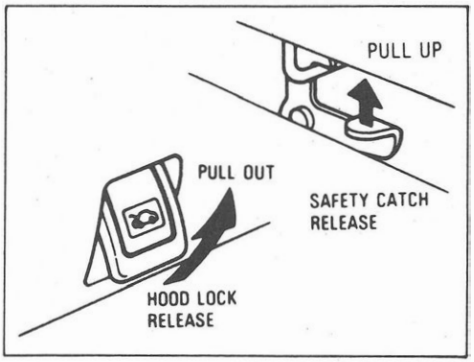
*Do not remove the cap quickly.* Fuel may be under pressure and spray out of the fuel filler neck under hot weather conditions, etc., which may cause injury. It is not unusual to hear a slight swoosh when the cap is opened.

To install the cap, turn the cap clockwise till you hear a click.

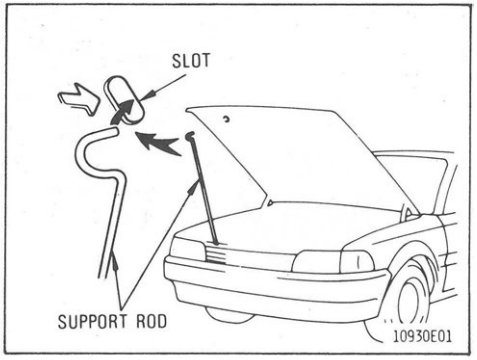
*Make sure that the cap is tightened securely* to prevent fuel spillage in case of an accident.

*Use only a genuine Holden fuel tank cap for replacement.* It has a built-in check valve.

## Hood release




**To open the hood, pull the hood release lever under the dash. The hood will then spring up slightly at the front. Go to the front of the vehicle, pull up on the safety catch lever and lift the hood.**




**After lifting the hood up, hold it open by inserting the support rod into the slot.**

The end of the rod should be inserted into the slot in the front edge of the hood. *Make sure the rod supports the hood securely*

Before closing the hood, check to see that you have not forgotten any tools, rags, etc. and return the support rod to its clip — this prevents rattles. Then lower the hood and make sure it locks into place. If necessary, press down gently on the front edge to lock it.

## An important warning about the engine exhaust

**Avoid inhaling the engine exhaust.** It contains carbon monoxide, which is a colourless and odourless gas. It can cause unconsciousness or even death.

**Make sure the exhaust system has no holes or loose connections.** The system should be checked each time the oil is changed or the vehicle is raised. If you hit something, or notice a change in the sound of the exhaust, have the system checked immediately.

**Do not run the engine in a garage or enclosed area except for the time needed to drive the vehicle in or out.** The exhaust gases cannot escape, making this a particularly dangerous situation.

**Do not remain for a long time in a parked vehicle with the engine running.** If it is unavoidable, however, do so only in an unconfined area and adjust the heating or cooling system to force outside air into the vehicle.

**Keep the boot lid, back hatch or tailgate closed while driving.** An open or unsealed boot lid, back hatch or tailgate may cause exhaust gases to be drawn into the vehicle. If you must drive with the boot lid, back hatch or tailgate open to accommodate a large object, close the windows, open all the dashboard vents and have the heating or cooling system deliver fresh air into the vehicle by turning the fan on high speeds with the air intake control set at the "FRESH" or "OUTSIDE AIR" position.

To allow proper operation of your vehicle's ventilation system, keep the inlet grilles in front of the windshield clear of snow, leaves, or other obstructions.

**If you smell exhaust fumes in the vehicle, drive with the windows open and the boot lid, or back hatch closed. Have the cause immediately located and corrected.**

## How to start the Engine

**Normal starting procedure (engine cold)**

1. Fasten seat belts.
2. Apply the parking brake.
3. Turn off lights and accessories.
4. Position rear view mirrors to obtain the best rear view.
5. **Automatic transaxle:**
   Put the gear selector in P or N.
   **Manual transaxle:**
   Shift into neutral.
6. Press the accelerator pedal **once** to the floor and release it. This sets the automatic choke and fast idle.
7. **With your foot off the accelerator pedal**, crank the engine by turning the key to START. Release it when the engine starts. Do not crank for more than 15 seconds at a time.

***Note: Refer to page 17 for warning light check procedure.***

8. After the engine warms up for about 10 seconds, you are ready to drive. **Do not "race" a cold engine.**

**If the weather is below freezing or if the car has not been driven for several days . . .**

- Before cranking the engine, fully depress and release the accelerator pedal **two or three times**. This gives a richer mixture for cold starting
- Crank the engine **with your foot off the accelerator pedal.**
- Let the engine warm up for a few minutes before driving.

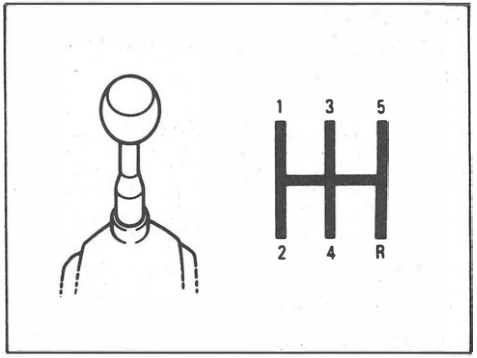
**If the engine is warm . . .**

- Hold the accelerator pedal about halfway down while cranking the engine. **Do not pump the pedal.**
- If the engine is quite hot and is reluctant to start, press the accelerator fully to the floor while cranking.

**If the engine is warm or hot and will not start, it may be flooded . . .**

- Depress the accelerator pedal and hold it on the floor for 15 or 20 seconds.
- **While holding the accelerator pedal to the floor,** crank the engine. It may take 20 or 30 seconds of continuous cranking to clear the excess fuel and start the engine. If the engine does not start, wait a few minutes and try again. Do not pump the accelerator pedal — just continue holding it to the floor.

## Driving with a manual transaxle




**The shift pattern is conventional as shown above.**

**Use the clutch correctly.**

Press the pedal down fully while shifting, and then release it slowly. Do not rest your foot on the pedal while driving, because it will cause needless wear. And do not slightly release the pedal to hold the vehicle when stopped on an uphill grade—use the parking brake.

**Recommended shifting speeds**

- For good fuel economy and long engine life, you should upshift at the following speeds:

*continued overleaf*

| gear | approx. speed km/h |
|---|---|
| 1 to 2 | 24 |
| 2 to 3 | 40 |
| 3 to 4 | 64 |
| 4 to 5 | 72 |

Shifting too soon will cause lugging and, possibly, pinging. Regularly revving the engine to maximum speed in each gear will cause excessive engine wear and high fuel consumption. Make sure the vehicle is completely stopped before shifting into reverse.

- If you slow to less than the following speeds, such as when cornering downshift to the next lower gear.

| gear | km/h |
|---|---|
| 2 | 15 |
| 3 | 28 |
| 4 | 40 |
| 5 | 50 |

The transaxle is fully synchronized and downshifting is easy.

**Good driving practice**

- When driving down a long hill, reduce your speed and downshift to a lower gear. The engine will provide a braking effect. Remember, if you ride the brakes, they may overheat and not work properly.
- Avoid overrevving the engine by slowing down before downshifting—especially on wet, icy, or snow covered roads—because it could cause a loss of traction.
- Always slow down in gusty crosswinds. Slowing down will allow you much better control.
- Make sure the vehicle is completely stopped before shifting into reverse. If it is difficult to shift into reverse, put the transaxle in neutral, release the clutch pedal momentarily, and then try again.
- Be careful when accelerating, upshifting, downshifting or braking on a slippery surface. The abrupt change in engine speed, such as sudden acceleration or engine braking, could cause the drive wheels to spin or skid.
- To get on a highway or to pass slower traffic, maximum acceleration may be necessary. Make sure you observe the following maximum allowable speeds in each gear:

**6A-F engine**

| gear | km/h |
|---|---|
| 1 | 47 |
| 2 | 88 |
| 3 | 128 |

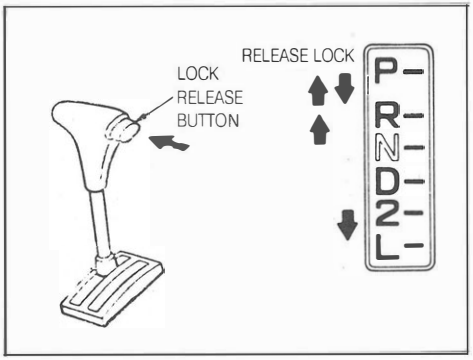
**4A-F engine**

| gear | km/h |
|---|---|
| 1 | 47 |
| 2 | 88 |
| 3 | 129 |

Do not downshift if you are going faster than the maximum allowable speed for the next lower gear.

*Important: the maximum allowable speeds given above, are those recommended by Holden. The maximum driving speed is governed by State Law.*

## Driving with an automatic transaxle — SL and SLX Models




**The transaxle uses a conventional sequence of selector positions.**

Lock release button must be depressed to move into or out of "P", to select "R" from "N" position, or to select "L". The function of the selector lever positions is described below.

**"P" — Park**

Use to hold the vehicle in place after the parking brake is set. The engine can be started in this mode. *Never select this range with the vehicle moving, as serious mechanical damage and loss of vehicle control may result.*

**"R" — Reverse**

Use for reversing the vehicle. Select this range after the vehicle has stopped completely.

**"N" — Neutral**

No gears are engaged. The engine can be started in this mode — or restarted while moving.

**"D" — Drive**

This is the position for normal driving.

**"2" — Second**

Use for driving in heavy traffic or on mountain roads or for engine controlled braking.

**"L" — Low**

Use for hard pulling through sand, mud or snow, for driving up and down steep hills and for more powerful engine braking than second ("2").

**For normal driving, put the selector in the "D" mode.**

The Holden automatic transaxle is a highly efficiently 3-speed unit. For best fuel economy, accelerate the vehicle from a stop by gradually increasing pressure on the pedal. The transaxle will automatically shift to the second and third gears.

If you need to accelerate rapidly, push the accelerator pedal all the way to the floor. The transaxle will automatically downshift to the second or first gear (low), depending on the vehicle speed.

**Using the "2" and "L" modes**

With the selector in "2", the vehicle will start in the first gear and automatically shift to the second gear, but will not shift to the third gear. With the selector in "L", the transaxle will not upshift at all. This gives you positive control over engine speed similar to that which you would have in a vehicle with a manual transaxle. The usual reason for selecting a lower mode is to obtain engine braking when driving in the mountains or in heavy traffic.

Be careful not to exceed the following speeds when accelerating or down shifting.

| | |
|---|---|
| "L" | 66 km/h |
| "2" | 120 km/h |

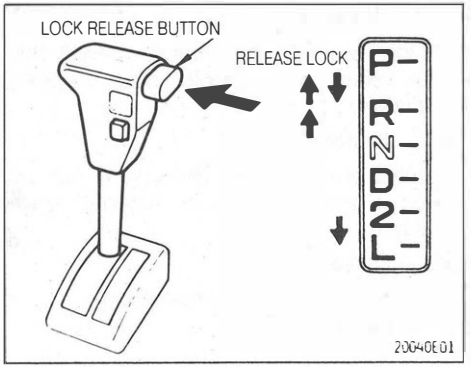
Do not select "2" mode if the vehicle is travelling faster then the maximum allowable speed.

The transaxle is not designed to withstand harmful engine over-revving when down-shifting to the second gear.

## Good driving practice

- Make sure the vehicle comes to a complete stop before selecting or moving out of reverse ("R" selector position).
- Never put the selector into "P" until the vehicle is fully stopped. And always use the parking brake, Do not rely on the transaxle to hold the vehicle.
- When driving down a long hill, reduce your speed and select a lower mode. The engine will provide a braking effect. Remember, if you ride the brakes, they may overheat and not work properly.
- Be careful when accelerating, upshifting, downshifting or braking on a slippery surface. The abrupt change in engine speed, such as sudden acceleration or engine braking, could cause the drive wheels to spin or skid.
- Always slow down in gusty crosswinds. This will allow you much better control.
- Do not go from "P" or "N" to "R" or "D" with the accelerator pedal depressed.

## Overdrive — automatic transaxle — SLX Model




**The transaxle uses a conventional sequence of selector positions.**

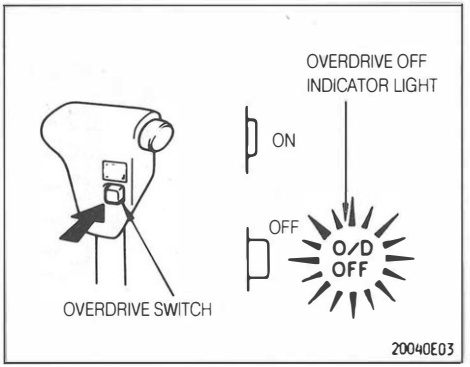
Depress the lock release button to select the "P", "R", "2" or "L" range. The function of the selector lever positions is described below:

**"P" range**

Use to hold the vehicle in place after the parking brake is set. The engine can be started in this range. *Never select this range with the vehicle moving, as serious mechanical damage and loss of vehicle control my result.*

**"R" range**

Use for backing up the vehicle. Select this range after the vehicle has stopped completely.




**"N" range**

*No gears are engaged. The engine can be started in this range-or restarted while moving.*

**"D" range**

This is the position for normal driving.

**"2" range**

Use for driving on mountain roads or for engine braking.

**"L" range**

Use for hard pulling through sand or mud, for driving up and down steep hills and for more powerful engine braking than that in the "2" range.

**For normal driving, put the selector in the "D" range and turn the overdrive switch on.**

The automatic transaxle is a highly efficient 4-speed unit. For best fuel economy, accelerate the vehicle from a stop by gradually increasing pressure on the pedal. The transaxle will automatically shift to the second, third and overdrive gears.

However, if engine coolant is below 50°C, the transaxle will not shift into the overdrive gear even with the overdrive switch on.

If you need to accelerate rapidly, push the accelerator pedal all the way to the floor. The transaxle will automatically downshift to the third, second or first gear, depending on your speed.

When the overdrive switch is turned off, the transaxle will automatically upshift from the first to third gear but will not upshift to the overdrive gear at all.

**Using the "2" and "L" ranges**

With the selector in "2", the vehicle will start in the first gear and automatically shift to the second gear, but will not shift to the third gear. With the selector in "L", the transaxle will not upshift at all. This gives you positive control over engine speed similar to that which you would have in a vehicle with a manual transaxle. The usual reason for selecting a lower range is to obtain engine braking when driving in the mountains or in heavy traffic.

Be careful not to exceed the following maximum allowable speed in each range when accelerating:

"L"..... 62 km/h
"2" .....113 km/h

Note, see under *Important* on page 44.
Do not select the "2" range if you are going faster then the maximum allowable speed. The transaxle is not designed to withstand harmful engine overrevving when downshifting to the second gear.

**Good driving practice**

- Make sure the vehicle comes to a complete stop before selecting or moving out of the "R" range.
- Never put the selector into "P" until the vehicle is fully stopped. And always use the parking brake. Do not count on the transaxle to hold the vehicle.
- When driving down a long hill, reduce your speed and select a lower range. The engine will provide a braking effect. Remember, if you ride the brakes, they may overheat and not work properly.
- Be careful when accelerating, upshifting, downshifting or braking on a slippery surface. The abrupt change in engine speed, such as sudden acceleration or engine braking, could cause the vehicle to spin or skid.
- Always slow down in gusty crosswinds. This will allow you much better control.
- Do not go from "P" or "N" to "R" or "D" with the accelerator pedal depressed.
- Always turn the overdrive switch on to improve fuel economy and quiet drive. However, if engine braking is needed when going downhill in the "D" range or if the transaxle is repeatedly upshifted and downshifted between the third and overdrive gears when climbing a gentle slope, it is suggested that the overdrive switch is turned off. Be sure to turn the switch on immediately afterward.
- When towing a trailer, in order to maintain engine braking efficiency and electrical charging performance, do not use overdrive.

## Braking tips

**Driving with the Holden tandem master cylinder brake system.** The Holden tandem master cylinder brake system is a hydraulic system with two separate sub-systems. If either sub-system should fail, the other will still work. However, the pedal will be harder to press, and your stopping distance will be longer. Also, the brake system warning light may come on. ***Do not rely on single brake system. Have your brakes fixed immediately.***

**Driving with the brake booster.** The brake booster uses vacuum to power-assist the brakes. If the engine should stop while you are driving, you can bring the vehicle to a stop with normal pedal pressure. There is enough reserve vacuum for one or two stops — but no more!

Do not pump the brake pedal if the engine stalls. Each push on the pedal uses up your vacuum reserve.

***Even if the power assist is completely lost, the brakes will still work. But you will have to push the pedal hard — much harder than normal. And your braking distance will be longer.***

### Good braking practice

- Washing your car or driving through deep water may get the brakes wet. If they are wet your car will require a longer stopping distance, and it may pull to one side when the brakes are applied. You should always test your brakes after getting them wet. The test is easy to make, you first ensure that the road is clear of traffic and pedestrians, then, whilst driving cautiously, press lightly on the brake pedal. If you do not feel the normal braking effect, the brakes are probably wet. To dry them, again drive cautiously whilst applying light pressure on the brake pedal.

  ***If the brakes remain inefficient, pull off the road and call a Holden dealer for assistance.***
- To drive down a long or steep hill, reduce your speed and downshift. Remember, if you ride the brakes excessively they may overheat and not work properly.
- Do not rest your foot on the brake pedal while driving. It can cause dangerous overheating, needless wear, and poor fuel economy.
- If you have a flat tyre while driving, do not brake suddenly. Keep a straight line while reducing speed. Then slowly move completely off the road to a safe place. (See "if you have a flat tyre" page 56)
- When stationary with an air-conditioner switched on, the engine speed will automatically be higher than when the air-conditioner is off. In such circumstances, if your car is equipped with an automatic transaxle, you must apply the foot brake to prevent the vehicle from creeping.

  If the vehicle is going to be stationary for more than a few moments, move the selector lever to "N" position and apply the parking brake.
- When parking on a hill, turn the front wheels until they touch the curb so that the vehicle will not roll. Apply the parking brake, and place the transaxle in P (automatic) or in First or Reverse (manual). If necessary, block the wheels. ***Before moving off, always select the gear you want before releasing the parking brake.***

**Caution:** Do not place anything on the flat panel behind the rear seat back, as such items may be thrown about and possibly injure people in the car during sudden braking or an accident. Secure all items in a safe place.

## Tips about economical motoring

**Getting the most from a litre of fuel and maximising the life of your vehicle is easy — just take it easy. Below are some tips on how to save money on both fuel and repairs.**

- **Keep your tyres inflated at the correct pressure.** Check the pressure at least once a month. Under-inflation causes tyre wear and wastes fuel.
- **Do not carry unneeded weight in your vehicle.** Excess weight puts a heavier load on the engine, causing greater fuel consumption.
- **Avoid lengthy warm-up idling.** Once the engine is running smoothly, begin driving — but gently. Remember, however, that in cold winter days this may take a little longer.
- **Accelerate slowly and smoothly.** Avoid fast starts.
- **Avoid long engine idling.** If you have a long wait and you are not in traffic, it is better to turn off the engine and start again later.
- **Avoid engine lugging** (engine revs too low for a given gear) or over-revving. Select a gear that is suitable for the road you are travelling.
- **Use your air conditioner only when absolutely necessary.** The air conditioner puts an extra load on the engine.
- **Avoid continuous speeding up and slowing down.** Stop-and-go driving wastes fuel.
- **Avoid unnecessary stopping and braking.** Maintain a steady pace. Try to time the traffic signals so you only need to stop as little as possible or take advantage of through streets to avoid traffic lights. Keep a proper distance from other vehicles to avoid sudden braking. This will also reduce wear on your brakes.
- **Avoid heavy traffic or traffic jams whenever possible.**
- **Do not rest your foot on the clutch or brake pedal.** This causes needless wear, overheating and poor fuel economy.
- **Maintain a moderate speed on highways.** The faster you drive, the greater the fuel consumption. By reducing your speed, you will cut down on fuel consumption.
- **Keep front end alignment correct.** Avoid hitting the curb and slow down on rough roads. Improper alignment not only causes fast tyre wear but also puts an extra load on the engine, which, in turn, wastes fuel.
- **Keep the bottom of your vehicle free from mud, etc.** This not only lessens weight but also helps prevent corrosion.
- **Keep your vehicle tuned and in top shape.** A dirty air cleaner, carburettor out of adjustment, improper valve clearance, dirty plugs, dirty oil and grease, brakes not adjusted, etc. all lower engine performance and contribute to poor fuel economy. For longer life of all parts and lower operating costs, keep all maintenance work on schedule, and if you often drive under severe conditions, see that your vehicle receives more frequent maintenance (see part "B" of this manual).

NOTE: Never turnoff the engine to coast down hill. Your power steering system (if equipped) and brake booster will not function without the engine running. Instead, downshift to an appropriate gear to utilize engine braking effect.

- Avoid driving through large amounts of standing water on the road.

  Large amounts of water entering the engine compartment may cause damage to the engine and/or electrical components.

## Pretrip safety check

It is a good idea to make the safety check before starting out on a trip. A few minutes of checking can help ensure safe and pleasant driving. Just a basic familiarity with your vehicle is required and a careful eye! Or, if you would like, your Holden Dealer will be pleased to make this check for you at a nominal cost.

If you make this check in an enclosed garage, make sure there is adequatae ventilation. **Engine exhaust is poisonous.** (See page 42).

### BEFORE STARTING THE ENGINE

#### Outside the vehicle

**Tyres.** Check the pressures with a gauge and look carefully for cuts, damage, or excessive wear.

**Wheel nuts.** Make sure no nuts are missing or loose.

**Fluid leaks.** After the vehicle has been parked for a while, check underneath for leaking fuel, oil, water, or fluid. (Water dripping from the air conditioner after use is normal.)

**Windshield wiper blades.** Look for wear or cracks.

**Lights.** Make sure that the headlights, stop lights, tail lights, turn signals and other lights are all working. Check the headlight aim.

#### Inside the vehicle

**Spare tyre and jack.** Check the tyre pressure and make sure you have your jack and wheel nut wrench.

**Seat belts.** Check that the buckles lock securely. Make sure that the belts are not worn or frayed.

**Horn.** Does it work?

**Instruments and controls.** Especially make sure that the warning lights, instrument lights, and defroster are working.

**Wipers and washer.** Make sure that they all work and that the wipers do not streak.

**Brakes.** Make sure that the pedal has enough clearance. (See Section 7 for instructions.)

**Spare fuses.** Make sure you have spare fuses. They should cover all the amperage ratings designated on the fuse box lids.

#### In the engine compartment

**Coolant level.** Make sure that the coolant level is correct. (See Section 7 for instructions.)

**Radiator and hoses.** Make sure the front of the radiator is clean — not blocked with leaves, dirt, or bugs. Check the hoses for cracks, kinks, rot, and loose connections.

**Battery and cables.** All the battery cells should be filled to the proper level with distilled water. Look for corroded or loose terminals and a cracked case. Check the cables for good condition and connections.

**Wiring.** Look for damaged, loose, or disconnected wires.

**Brake and clutch fluid levels.** Make sure that the brake and clutch fluid levels are correct. (See Section 7 for instructions.)

**Engine drive belts.** Check all belts for fraying, cracks, wear or oiliness. Apply thumb pressure between the pulleys. The deflection of each belt should be within the specified limits. (See Section 7 for instructions.)

**Fuel lines.** Check the lines for leaks or loose connections.

### AFTER STARTING THE ENGINE

**Exhaust system.** Look for cracks, holes and loose supports. Listen for any leakage. Have any leaks fixed immediately. (See engine exhaust warning in Section 2.)

**Power steering fluid.** With the engine idling, give the steering wheel several end-to-end turns and check the fluid level. (See Section 7 for instructions.)

**Engine oil level.** Stop the engine and check the dipstick with the vehicle parked on a level spot. (See Section 7 for instructions.)

**WHILE DRIVING**

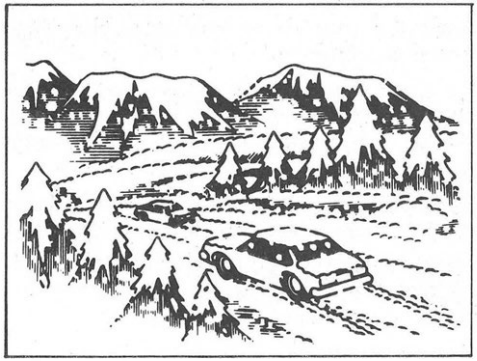
**Instruments.** Make sure that the speedometer and gauges are working.

**Brakes.** At a safe place make sure the brakes do not pull.

**Anything unusual?** Look for loose parts and leaks. Listen for abnormal noises.

If everything looks allright, set your mind at ease and enjoy your trip!

## Winter driving tips



**Make sure you have an ethylene-glycol based anti-freeze in the radiator to prevent the coolant from freezing.**

The proportion of anti-freeze varies according to the lowest anticipated temperature in your area and the quantity must be proportioned to the anti-freeze manufacturers' specifications.

When adding the anti-freeze drain all the untreated coolant from the system.

## Cooling system inhibitor selection

The use of Holden radiator inhibitor specification HN 1791 (Part No. 0881200025A) is of primary importance when replacing the coolant in Holden vehicles. The chemical composition of the inhibitor is the product of many years of development. It prevents corrosion from taking place in the engine cooling system. Therefore, it must always be added when renewing the engine coolant and never ***mixed*** with any other additive or anti-freeze.

In the event of anti-freeze type inhibitor being required, all existing coolant will need to be drained and the system be thoroughly flushed.

Refill with two thirds water and one third inhibitor meeting Holden's specification No. HN 1897. This inhibitor helps protect your car's cooling system against rust. It also protects the coolant from freezing, down to -16 degrees celcius and in addition will also raise the boiling point of the cooling system. This inhibitor may be used for the rest of the car's life. To give your car maximum protection, it is important to maintain the correct percentage. So when topping up, premix a solution of two thirds water and one third inhibitor HN 1897.

*continued overleaf*

**Check the condition of the battery and cables.**

Cold temperatures reduce the capacity of any battery, so it must be in top shape to provide enough power for winter starting. Section 7 tells you how to visually inspect the battery. Your Holden Dealer and most service stations will be pleased to check the level of charge.

**Make sure the engine oil viscosity is suitable for the cold weather.**

See Section 7 for recommended viscosity. Leaving a heavy summer oil in your car during winter months may cause harder starting. If you are not sure about which oil to use, call your Holden Dealer — he will be pleased to help.

**Check the spark plugs and ignition system.**

Make sure the plugs are not worn, fouled, or incorrectly gapped. (Section 7 has instructions for inspecting.) Visually check the rest of the system for loose connections or obvious damage.

**Keep the door locks from freezing.**

Squirt lock de-icer or glycerine into the locks to keep them from freezing. To open a frozen lock, try warming the key before inserting it.

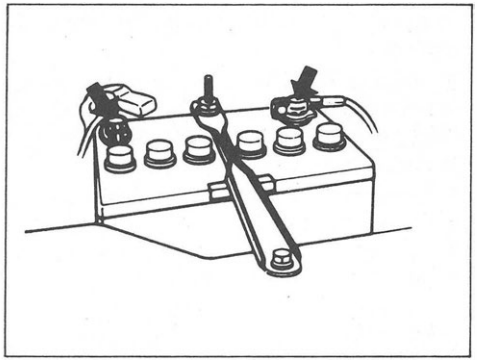
**Keep ice and snow from accumulating under the fenders.**

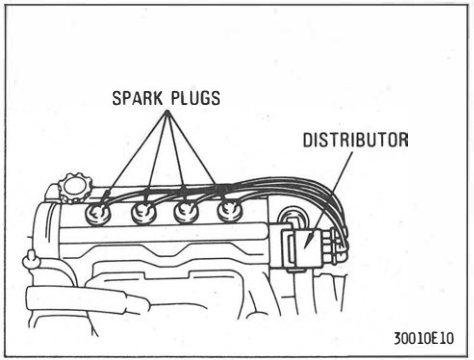
Ice and snow build up under your fenders can make steering difficult. During bad winter driving, stop and check under the fenders occasionally.

**Depending on where you are driving, you might carry some emergency equipment.**

Some of the things you might put in the trunk are tyre chains, window scraper, flares, small shovel, jumper cables, tools, etc.

## If your vehicle will not start — simple checks






**First, make these few simple checks . . .**

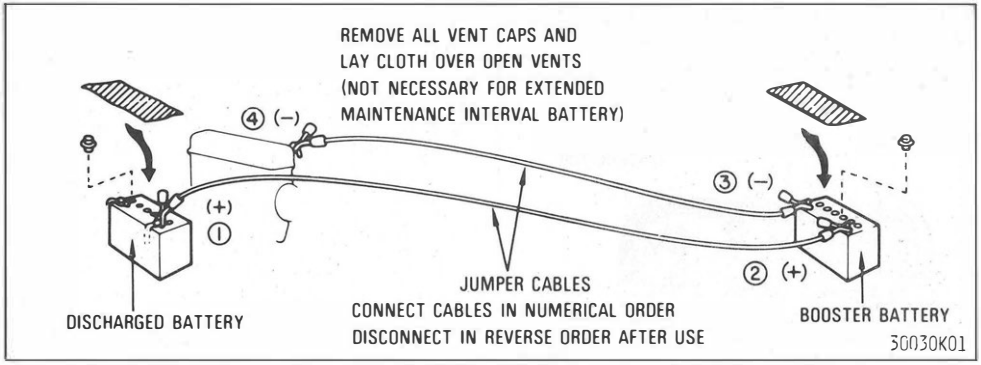
**• If the engine is not turning over or is turning over too slowly—**

1. If your car has an automatic transaxle, make sure it is in Neutral or Park, and the parking brake is applied.
2. Under the hood, check both battery cables. Make sure that their connections to the battery, chassis, and starter are tight and clean.
3. Switch on the interior light. If it is out, dim, or gets dim when the starter is cranked, the battery is discharged, you may try jump starting (see next page). *Do not push or tow start your vehicle.*

**• If the engine turns over at its normal speed but will not start —**

1. Check the fuel gauge.
2. Under the hood, check that all the push-on connectors are tight at the coil, distributor, and spark plugs.
3. If the engine is warm or if you smell raw fuel the engine may be flooded — see the starting instructions, Section 3. If it still will not start, remove and dry the spark plugs, and then reinstall them.
4. If the engine still will not start, it needs adjustment or repair. Call a Holden Dealer for assistance.

## Jump starting




**To avoid serious personal injury and damage to your vehicle which might result from battery explosion, acid burns, electrical burns, or damaged electronic components, these instructions must be followed precisely.** If you are unsure about how to follow this procedure, we strongly recommend that you seek the help of a competent mechanic or towing service.

**WARNING: Batteries contain sulfuric acid, which is poisonous and corrosive. Wear protective safety glasses when jump starting, and avoid spilling acid on your skin, clothing, or vehicle.** If you should accidentally get acid on yourself or in your eyes, *remove any contaminated clothing and flush the affected area with water for at least 15 minutes.* Then get **immediate** medical attention. If possible, continue to apply water with a sponge or cloth while enroute to the medical treatment.

*The gas normally produced by a battery will explode if a flame or spark is brought near.* Therefore, do not smoke or light a match while jump starting.

*The battery used for boosting must be 12-volt.* Do not jump start unless you are sure that the booster battery is correct.

1. If the booster battery is installed in another vehicle, make sure that the vehicles are not touching. Turn off all unnecessary lights and accessories.

2. Remove all the vent caps from the booster and the discharged batteries. Lay a cloth over the open vents on both batteries. (This helps reduce the explosion hazard.)

3. If the engine in the vehicle with the booster battery is not running, start it and let it run for a few minutes. During jumping run the engine at about 2000 rpm.

4. Connect the jumper cables in the exact order shown in the illustration: *positive-to-positive (+),* and *negative-to-engine* or *body ground (–).* Note that you first connect the positive cable to the discharged battery and then to the booster battery. Next, connect the negative cable to the booster battery and then to a solid, stationary, metallic point (e.g. engine hanging hook) away from the battery. Do not connect it to or near any part that moves when the engine is cranked.

**When making the connections, do not accidentally let the jumper cables or clamps touch anything except the correct battery terminals or the ground. Do not lean over the battery when making the connections.**

5. Start your engine in the normal way. After starting, run it at a fast idle speed (2000 rpm) for several minutes.
6. Carefully disconnect the cables in the exact *reverse* order: the negative cable and then the positive cable.
7. Carefully dispose of the battery cover cloths — they may now contain sulfuric acid.
8. Replace all the battery vent caps.

If the cause of your battery discharging is not apparent (for example, lights left on), you should have it checked.

## If your car overheats

**Pull safely off the road, stop the engine, and open the hood.**

**Then follow this procedure . . .**

1. Check the drive belt to see whether it is broken or loose. (Instructions for checking the tension are given in Section 7).
2. Check the coolant reservoir. If it is dry, add water to the reservoir while the engine is running. Fill it about half full.

   **WARNING: Do not remove the radiator cap especially when the engine and radiator are hot.** Scalding hot fluid and steam may be blown out under pressure, which could cause serious injury.
3. Check for obvious coolant leaks. Look at the radiator, hoses, and under the car. (The see-through reservoir may not give an accurate indication of coolant loss when the engine is overheated.)

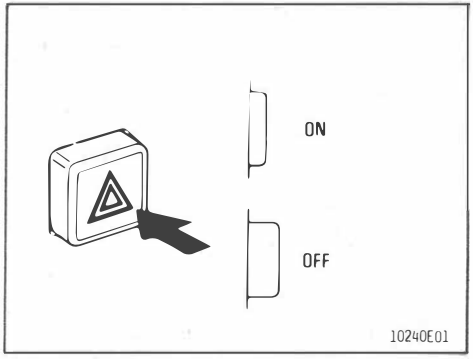
**Caution: *The level of the coolant in the see-through reservoir does not always indicate the coolant content of the system. For instance, if there has been a sudden loss of coolant, the level in the reservoir will not drop. On such an occasion, remove the radiator cap when the engine has cooled enough and check the coolant level. Top up the radiator if necessary. Always check for coolant leaks before restarting the engine. If a leak is found, or the coolant level is dropping, contact your Holden Dealer before driving the vehicle.***

4. If the drive belt is alright and there are no obvious leaks, you may help the engine cool down more quickly by running it at a fast idle speed for a few minutes. Make sure the air-conditioner is OFF.

   Note: Your vehicle has a temperature controlled electrical cooling fan (see page 72) which will rotate when the engine is running and overheating. If it does not rotate, an electrical failure has occurred. Switch the ignition OFF immediately and contact your nearest Holden Dealer.
5. After the engine temperature has cooled to normal, again check the coolant level in the reservoir. If necessary, bring it up to half full again. Serious coolant loss indicates a leak in the system. You should have it checked as soon as possible at your Holden Dealer.

**Important:**
**The engine in your vehicle is equipped with a by-pass valve. Therefore, if the engine tends to overheat, removal of the thermostat would have an adverse effect, causing a lowering of cooling efficiency**

## If you have a flat tyre




**First**, make sure you are completely off the road — well away from the traffic. Avoid stopping on the centre strip of a highway. Park on a level spot with firm ground.

**Second**, turn on your hazard warning lights (press the switch, see above illustration).

**Third**, set the parking brake firmly and put the transaxle in Park (automatic), or Reverse (manual) then turn off the ignition switch.

**Fourth**, have everyone get out of the vehicle and place them on the side away from traffic.

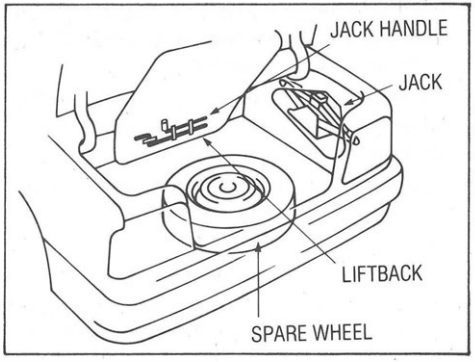
**Fifth**, read the following instructions thoroughly. They are designed to help a person who has never changed a wheel.

### Jacking precautions

As a precaution against personal injury:

- Follow jacking instructions.
- Use a jack only for lifting your vehicle during wheel changing.
- Never get beneath the vehicle when supported by a jack.
- Do not start or run the engine while your vehicle is supported by a jack.

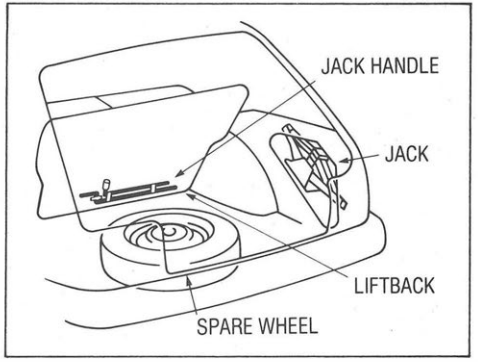
## Remove the spare wheel and jack from the vehicle—sedan




**1. Remove jack handle, wheel nut wrench, jack and spare wheel from rear of vehicle.**

Roll back the carpet and lift the spare wheel cover from the spare wheel. Unclip the jack handle and wheel nut wrench from the underside of the wheel cover. Remove the spare wheel retaining bolt and lift the wheel out of the vehicle. Lastly, turn the jack lifting screw anti-clockwise to release the jack and place the jack on the ground near the flat tyre.

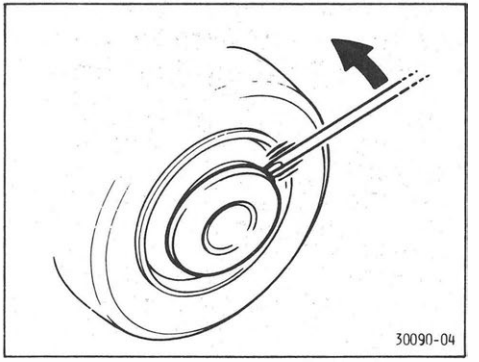
## Remove the spare wheel and jack from the vehicle— Hatchback




**1. Remove jack handle, wheel nut wrench, jack and spare wheel from rear of vehicle.**

Roll back the carpet and lift the spare wheel cover from the spare wheel. Unclip the jack handle and wheel nut wrench from the underside of the wheel cover. Remove the spare wheel retaining bolt and lift the wheel out of the vehicle. Lastly, remove service hole cover, turn the jack lifting screw anti-clockwise to release the jack and place the jack on the ground near the flat tyre.

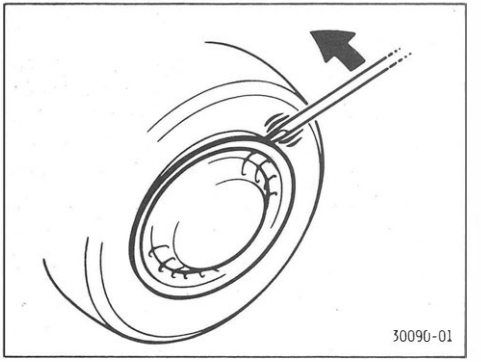
## Remove wheel centre ornament — half cover type wheel ornament




**2. Push the flat end of the wheel nut wrench under the ornament edge and prise the ornament from the wheel.**

*To avoid personal injury, do not attempt to pull off the ornament by hand.*

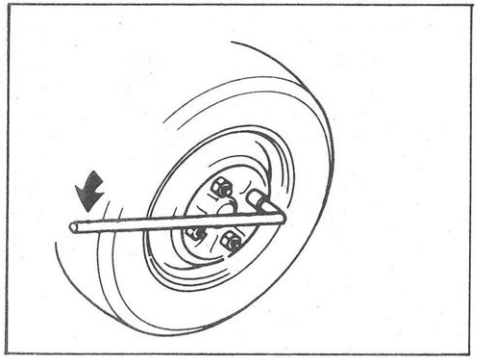
## Full cover type wheel ornament




**Prise the wheel cover from the wheel rim.**

*continued overleaf*

## Loosen the wheel nuts — All Models



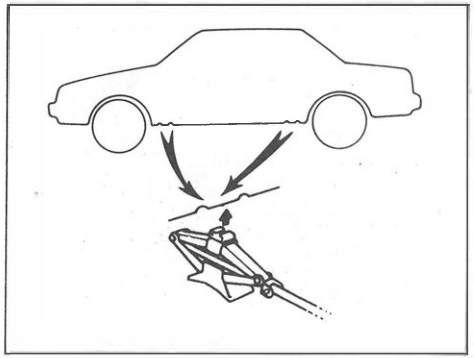
**3. Loosen the four wheel nuts.**

You should always loosen the wheel nuts slightly ***before*** raising the car.

The nuts turn ***counter-clockwise*** to loosen. To get the maximum force, fit the wrench to the nut so that the handle is on the left side, as shown above. Hold the wrench near the end of the handle and use your body weight to press down on the wrench.

Do not remove the nuts yet. Just unscrew them about one-half turn.

## Position the jack

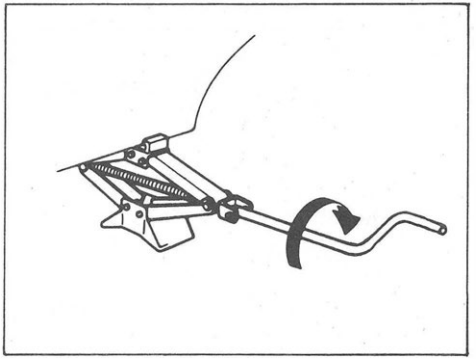


**4. Position the jack under the jacking point nearest the punctured tyre.**

Look for the two notches in the underbody side seam.

Make sure that the jack is positioned on level and solid ground

## Raise the vehicle



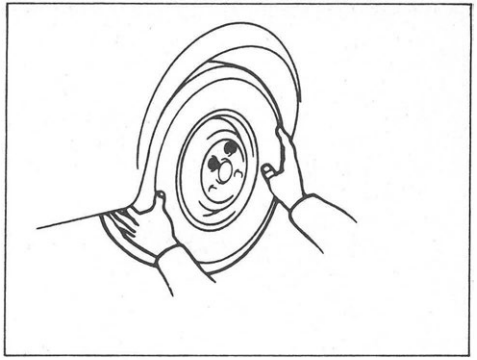
**5. Raise the car high enough for the spare wheel to be installed.**

To raise the car, insert the handle (it is a loose fit into the jack) and turn the handle ***clockwise***. As the jack touches the car and begins to lift some weight, double-check that it is properly located. ***Never get under the car when it is supported only by a jack***.

If the tyre is quite flat, remember to raise the car enough so that the spare wheel — which is not flat at the bottom — will have clearance to be fitted.

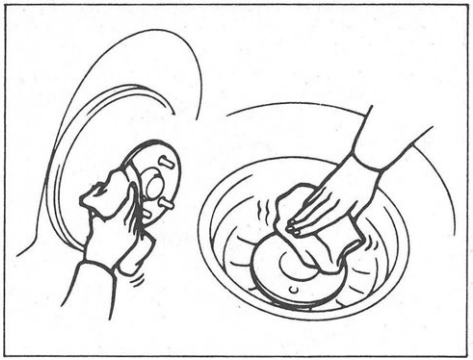
Always have the spare wheel close by in readiness for the change over.

## Remove the wheel



**6. Remove the wheel nuts, and take the wheel off the vehicle.**

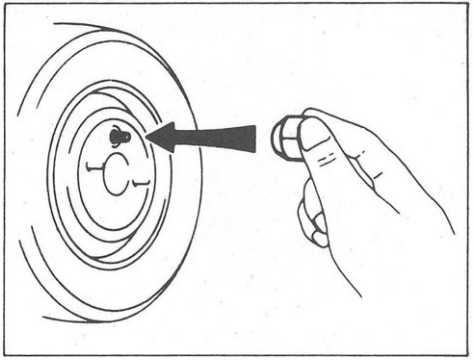
## Clean contact surfaces



**7. Before installing the spare wheel, remove any foreign matter from the stub axle hub and wheel hub contact surfaces.**

Installation of wheels without good metal-to-metal contact at the mounting surface can cause wheel nuts to loosen and eventually cause a wheel to come off while driving. Therefore, after the first 1600 km, check to see that the wheel nuts are tight.

## Place spare wheel on vehicle



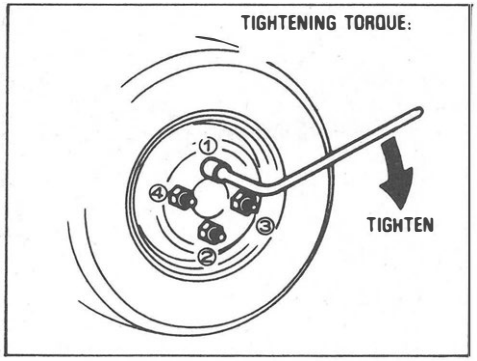
**8. Place spare wheel on vehicle and install the wheel nuts finger tight.**

Align wheel stud holes with the studs on the axle and lodge the wheel on the studs. Starting with a wheel nut at the top, install all the nuts.

Tighten the nuts as much as possible by hand and then tighten them again with the wheel nut wrench.

*continued overleaf*

## Lower the vehicle




**9. Lower the vehicle completely and tighten the wheel nuts.**

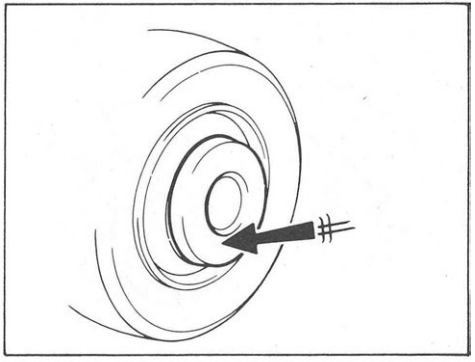
Turn the jack handle ***counterclockwise*** to lower the vehicle.

Use only the wheel nut wrench to tighten the nuts. Do not use your foot on the wrench or a pipe as an extension to the wrench. Make sure the wrench is securely engaged over the nut. Tighten each nut a little at a time in the order shown. Repeat the process until all the nuts are tight.

As soon as possible after changing wheels, have a technician tighten the wheel nuts to the proper torque with a torque wrench.

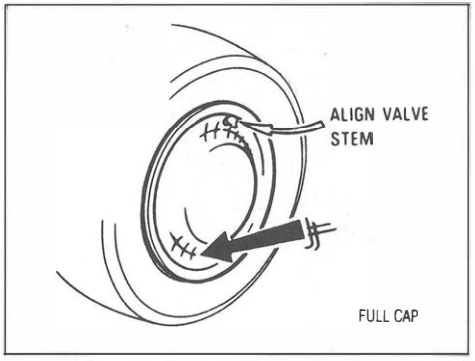
***Important: If you have changed an alloy wheel, re-tighten the wheel nuts after driving the vehicle 1600 km.***

## Install half cover type wheel ornament



**10. Place the ornament in position on the newly fitted wheel; then, with the side or heel of your hand, tap the ornament into place.**

## Install full cover type wheel ornament




**11. Make sure the valve stem is aligned with slot in wheel cover and, using the heel or side of your hand, gently drive the cover into position.**

**After changing wheels**

Stow the flat tyre, jack and tools securely in their places at the rear of the vehicle. Do not forget to turn off the hazard warning lights before re-commencing your journey.

It is recommended that you have the flat tyre repaired at the earliest possible time.

*Before driving, make sure that all the tools, jack and flat tyre are securely in place in their storage location to reduce the possibility of personal injury during a collision or sudden braking.*

## If your vehicle needs to be towed —

**If towing is necessary, we recommend you have it done by your Holden Dealer or a commercial tow truck service.**

Proper equipment will help ensure that your vehicle is not damaged while being towed. Commercial operators are generally aware of the state and local laws pertaining to towing.

***Your vehicle can be damaged if it is towed incorrectly.*** Although most operators know the correct procedure, it is possible to make a mistake. Rather than risk damage to your vehicle, why don't ***you*** make sure that the following few precautions are observed. If necessary, show this page to the tow truck driver.

### TOWING PRECAUTIONS

- Use safety chain system for all towing, and abide by the state and local laws.

**Manual transaxle**

- **Towing with rear wheels on ground:**

Release the parking brake.

- **Towing with front wheels on road:** Vehicles with a manual transaxle can be towed with the front wheels on the road. However, special precautions must be taken. The ignition key has to be in the ACC position and the steering must be locked in the straight ahead position with a special steering clamping tool designed by towing equipment manufacturers for use by tow truck operators. If the front wheels are damaged, use a car ambulance or a flat topped trailer.

**Automatic transaxle**

- **Towing with rear wheels on road:**

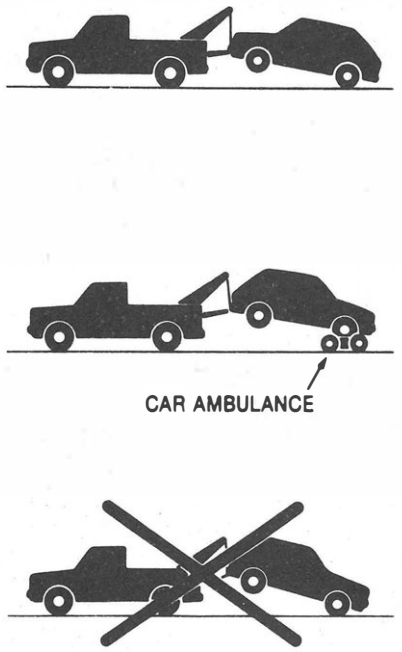
  Release the parking brake.

- **Towing with four wheels on road:**

  The vehicles can be towed from the front only. *Do not tow faster than 45 kmh and farther than 80 km.*

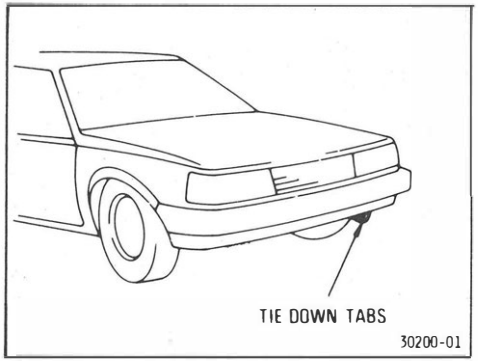
Before towing, check the transaxle fluid. If the level is lower than the "HOT" line on the dipstick, add fluid or use a car ambulance or a flat topped trailer.

**Never tow from the rear with the front or, all four wheels on the road**, as it may cause serious damage to the automatic transaxle. If your vehicle cannot be towed from the front, it must be placed on a car ambulance (see illustration in next column) or loaded on a flat topped trailer.




AUTOMATIC TRANSAXLE—do not tow from rear with front wheels on road.

## Emergency towing




**For emergency towing, secure a cable to the tie-down tab under the front of the vehicle.** *Use it only when your vehicle must be towed on hard-surfaced roads.* A driver must be in the vehicle to steer it and operate the brakes. *If the engine is not running, the power assist for the brakes and steering will not work so steering and braking will be much harder than usual.* Towing in this manner must not be done if the wheels, axles, drive train, steering or brakes are damaged.

Before towing, release the parking brake and put the transaxle in neutral. *The key must be in "ACC" (engine off) or "ON" (engine running).*

## Protecting your Holden from corrosion

Diligent research and design, utilizing the most advanced technology available, has done its part to help prevent rust and has provided you with the finest quality in the construction of your car. Now, it is up to you. Proper care of your Holden can help ensure long-term rust prevention.

**The most common causes of corrosion to your vehicle are:**

- The accumulation of road salt, dirt and moisture in hard-to-reach areas under the car.
- Chipping of paint, or undercoating caused by minor accidents or by stones and gravel.

**Your care is especially important if you live in a particular area or operate your car under certain environmental conditions:**

- *Road salt or dust control chemicals* will accelerate rust, as will the presence of salt in the air near the sea-coast or in areas of industrial pollution.
- *High relative humidity,* accelerates rust, especially when temperatures range just above the dew point (condensation temperature).
- *Wetness or dampness* to certain parts of your car for an extended period of time may cause rust even though other parts of the car may be dry.
- *High temperatures* will cause rust to those components of the car which are prevented from quick-drying due to lack of proper ventilation.

The above signifies the necessity to keep your car, particularly the underside, as clean as possible and to repair any damage to paint or protective coatings as soon as possible.

**To help prevent corrosion on your Holden, follow these guidelines:**

**WASH YOUR CAR FREQUENTLY**. It is, of course, necessary to keep your car clean by regular washing. However, to prevent rust or corrosion, the following points should be observed.

- If you drive on salted roads or it you live near the ocean, you should hose off the underside of the car at least twice a month to minimise rusting.
- High pressure water or steam is effective for cleaning the car's underside and wheel housings. Pay particular attention to these areas as it is difficult to see all the mud and dirt. It will do more harm than good to simply wet the mud and debris without removing them. The lower edge of doors, rocker panels and frame members have drain holes which should not be allowed to clog with dirt as trapped water in these areas can cause rust.
- It is preferable that the underside of the car be washed thoroughly when winter is over.
- If your particular operating conditions are of a consistent adverse nature your Holden Dealer will be happy to advise you on additional rust prevention measures and undercoating.

After washing your car, make sure the brakes are fully dry before driving (see "Washing and waxing your Holden" for more tips.)

**Check the condition of the paint**. If you find any chips or scratches in the paint, touch them up immediately to prevent rust from starting. Apply the paint soon after the damage occurs or rust may set in. To do a good job, stir the paint well and use a small artist's brush. Make sure the area is clean and dry. Only apply the smallest possible amount of paint to the area where the paint is missing — do not paint on the surface around the scratch or chip. If the chip or scratches have gone through to the bare metal, have a recognised body shop make the repair.

*continued overleaf*

**Check the interior of your car**. Water and dirt can accumulate under the floor mats or trunk mats, and could cause rust. Occasionally check under the mats to make sure the area is dry. Be particularly careful when transporting chemicals, cleansers, fertilizers, salt, etc. and these should be transported in proper containers. If a spill or leak should occur, immediately clean and dry the area.

**USE MUD FLAPS ON YOUR VEHICLE**. If you drive on salted or gravel roads, mud flaps help protect your car. Therefore, if a mudflap is lost, a new one should be fitted as soon as possible.

**DO NOT PARK YOUR CAR IN A DAMP, POORLY VENTILATED GARAGE**. If you wash your car in the garage, or if you drive it in covered with water or snow, your garage may be so damp it will cause rust. Even if your garage is heated, a wet car can rust in it if the ventilation is poor.

## Washing and waxing your Holden

**Wash your car in the shade when the body is not hot to touch. Use a mild carwash soap and rinse it well.**

Dirt can cause small scratches in the paint and the chemicals in some dirt and air pollutants can cause deterioration of the paint and trim. Therefore, frequent washing is recommended. And if you drive or park your Holden near the ocean, it is especially important.

Begin by rinsing all loose dirt off the car with a hose. If the underside has picked up mud or road salt, use a hard, direct stream from the hose to remove it. ***Wash*** with a commercial car-wash product, which is available at your Holden Dealer or auto parts store. Follow the manufacturer's mixing instructions carefully. Do ***not*** use a harsh household soap or detergent. A harsh detergent has the ability to remove a previous protective wax coating from paintwork, thus exposing it to the elements. When washing your vehicle most in-ground dirt will respond to warm water. Dip your sponge or cloth into the wash bucket frequently and do not rub too hard. Let soapy water remove the dirt.

***Rinse*** the car thoroughly. If any soap dries on the car, it may cause streaking. In hot weather, you may have to rinse each section of the car right after you wash it.

***Dry*** the car with a soft moist chamois. The main purpose of drying is to remove excess water so that the car will air dry without water spots. Do not rub or press hard, you might scratch the paint. Never air dry a vehicle that has been subjected to a detergent as this can cause water spot marks on the paintwork, which may not always be removeable.

If you detect any stone chips or scratches in the paint, touch them up immediately to protect the bare metal from rust. Touch-up paint is available at most Holden Dealers.

**Waxing is required to maintain the original beauty of your Holden's finish. It is recommended that a wax of good quality be used.**

Always wash and dry the car before you begin waxing, even if you are using a combined cleaner and wax. Road tar may be removed with turpentine. Use warm water and car-wash soap for insects and tree sap. Commercial products are also available.

***Do not use petrol, strong solvent or thinners.***

**Cleaning and maintaining unpainted polypropylene bumpers.**

To maintain the original beauty of the bumpers, observe the following precautions:

- Be careful not to spill brake fluid or battery electrolyte on the bumpers. Wash any spills with water immediately.

- The bumper face is soft. Remove dirt carefully and do not scrub with abrasive cleaners.
- Protect the bumpers from high temperatures. Always remove the bumpers if your vehicle is re-painted and placed in a high heat paint waxing booth.

Wash and rinse as above. To remove stubborn dirt use a suitable household solvent cleaner (follow the manufacturer's instructions).

Note: If dirt is ingrained, agitate with soft bristle prior to rinsing and/or wiping.

**After cleaning protection.** Apply a suitable auto accessory proprietory protector containing anti-static agents to repel dirt and dust.

**To restore bumpers to "near new" condition.**

Clean bumper as described above, allow to dry, and then polish the surface with black shoe polish. Apply polish with a cloth and rub-in.

## Cleaning the interior

**The vinyl upholstery may be easily cleaned with a mild soap or detergent and water.**

Vacuum first to remove loose dirt. Then with a sponge or cloth, apply a soap solution to the vinyl. Allow it to soak for a few minutes to loosen the dirt. Then rub briskly with a clean, damp cloth to remove the dirt and rinse off the soap. If all the dirt is not removed, repeat the operation. Commercial foaming-type vinyl cleaners are also available which work well. Follow the manufacturer's instructions. ***Do not use solvent, thinners or petrol or window cleaner on the interior.***

Your fabric upholstery may require light vacuuming from time to time, to remove loose dirt, particularly in areas of heavy use. To give your fabric longer life and keep it looking at its best, cleaning is sometimes necessary. Call a professional cleaner if you can, but if you decide to do it yourself, use a reputable brand of upholstery shampoo which is recommended for use on your particular fabric type, as shown in the table opposite.

| GRADE | MODEL | FABRIC TYPE |
|---|---|---|
| SL and SL/X | SEDAN HATCH | POLYESTER |
| SL/E | SEDAN HATCH | VELOUR |

**Speed is your best guarantee for successful stain removal.** Nine out of ten spots will vanish if they are treated immediately.

Keep the necessary materials for stain removal handy in one place.

They are: a detergent suitable for your fabric, a small piece of sponge, clean absorbent cloths and paper towelling or white tissues.

*continued overleaf*

**Procedure for removing stains (upholstery).**

1. Firstly, remove the source of the stain using one of the following methods:

(a) Blot up liquids by applying pressure with paper towels, tissues or dry absorbent cloths.

(b) Scoop up solids with a knife or spoon.

(c) Brush, burn or scorch marks from pile surface.

2. Take a small piece of sponge or clean cloth and apply a small amount of cleansing agent at a time, with a blotting or dabbing motion, work inwards from the edge of the stain to prevent it spreading.

Do not over wet, excessive soaking may cause rings on the surface, spreading the stain further and may also damage the backing.

3. Once the cleansing agent has removed the stain, blot up excess moisture from the treated area by applying pressure with paper towels, tissues, or absorbent cloths.

4. Rinse by applying clear tepid water, using a small piece of sponge or clean cloth, again working inwards from the edge of the affected area. DO NOT RUB. This is particularly important when cleaning pile fabric (i.e. velvet/velour). Rubbing may produce permanent pile distortion.

5. Remove excess moisture as outlined in procedure 3.

6. After stain removal, it may be desirable to clean the whole surface with a good quality upholstery cleaner.

7. Gentle brushing with a soft brush may be necessary to restore the appearance of velvet/velour.

**Use a good foam-type shampoo to clean the carpets.**

Begin by vacuuming thoroughly to remove as much dirt as possible. Several types of foam cleaners are available. Some are in aerosol cans and others are powders or liquids which you mix with water to produce a foam. To shampoo the carpets, use a sponge or brush to apply the ***foam***. Rub in overlapping circles. Do not apply water — the best results are obtained by keeping the carpet as dry as possible. Read the shampoo instructions and follow them closely.

**The seat belts may be cleaned with mild soap and water or with carpet shampoo.**

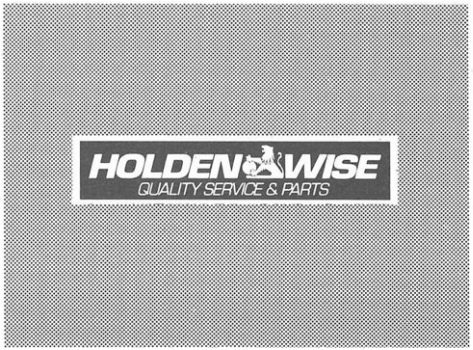
Use a cloth or sponge. As you are cleaning check the belts for excessive wear, fraying or cuts. ***Do not use dye or bleach on the belts — it will weaken them.***

**When cleaning the windows inside, be careful not to scratch or damage heater wires on the rear window.**

You may use any household window cleaner. But do be careful not to damage the heater wires.

**If you have any questions about the cleaning of your Holden, your local Holden Dealer will be pleased to answer them.**

## Maintenance facts




**Regular maintenance is essential.**

We urge you to protect your new car investment by having it serviced properly and regularly. For guidance in this regard, there is a maintenance schedule in part "B" of this manual. Part "B" also contains service vouchers for presentation to your Holden Dealer when the car is due to be serviced.

Regular maintenance will ensure.:

- Engine emission is kept within legal limit
- Maximum fuel economy
- Long vehicle life
- Maximum driving enjoyment
- Safety
- Reliability
- Full warranty protection
- Compliance with safety regulations.

Your Holden has been designed for economical driving and economical maintenance. Many formerly required maintenance items are no longer required or are not required as often. Make sure that your car runs at peak efficiency and lasts a long time — follow the maintenance schedule in part "B" of this manual. For most people, the odometer reading will indicate when service is needed. If, however, you drive infrequently, your car should be serviced at least every 6 months, as shown on the schedule. Under severe driving conditions, more frequent maintenance is required.

**Where to go for service**

It is recommended that your car be taken to a Holden Dealer for servicing because it will be worked on by mechanics who receive regular in-house training on Holden vehicles: as well as the the latest factory service bulletins and technical information. Also your Holden Dealer has invested in many high quality precision Holden tools so that service and repair work can be carried out quickly and efficiently, which ultimately could mean a cost saving to you.

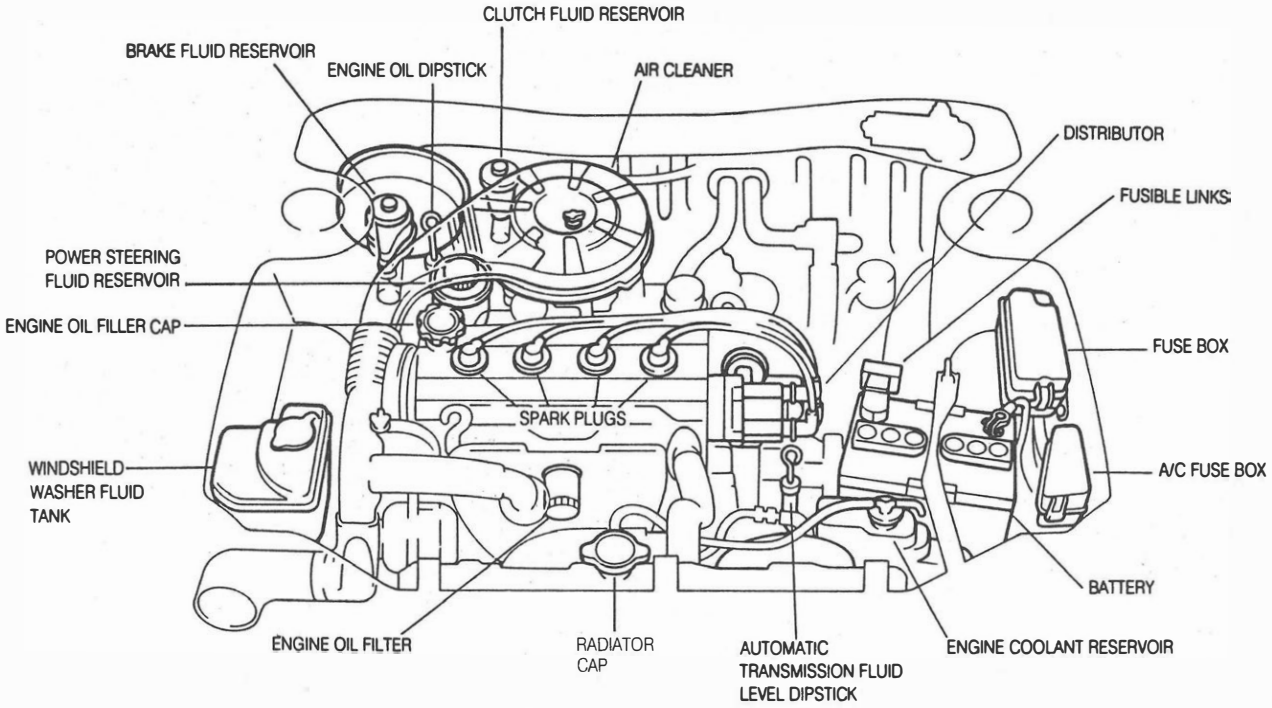
**What about do-it-yourself maintenance?**

Many of the maintenance items are easy to do yourself if you have a little mechanical ability and a few basic automotive tools. These items are referred to in Section 7. Doing some of your own car maintenance will save you money.

Note, however, that some maintenance tasks require special tools and skills. These are best performed by qualified Holden mechanics. If you plan on doing only simple maintenance items, your Holden Dealer will be pleased to perform the remaining service tasks.

If you are a skilled do-it-yourself mechanic, the Holden factory service manuals are recommended. Please be aware that do-it-yourself maintenance can affect your warranty coverage. See part "B" of this manual for the details.

## Engine compartment overview



## Do-it-yourself service precautions

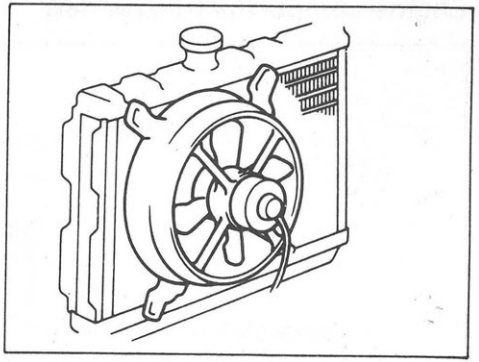
As with any machinery, extreme care should be taken when working on your car to prevent accidental injury. Here are a few precautions that you should be especially careful to observe:

- Because ignition systems form a certain hazard to any person contacting live parts in the engine compartment. Persons wearing heart pacemakers are advised not to be in the vicinity of the engine while it is being worked on, or when the ignition is switched on; as they could be affected when certain voltage, current, and frequency conditions exist.
- Immediately after driving, the engine, radiator, exhaust manifold, catalytic converter and power train oils will be hot. Therefore, do not work on the vehicle until the engine is cold (see "Catalytic Converter" pages 1 and 2), unless you are checking the automatic transaxle fluid level or power steering.
- When the engine is running, keep hands, clothing, and tools away from the moving fan. (It is advisable to remove rings, watches and ties).
- Do not allow smoking, sparks, or flames around petrol or the battery. The fumes are flammable.
- Be extremely cautious when working on the battery. It contains poisonous and corrosive sulphuric acid.
- Do not get under your car with just the body jack supporting it. Always use automotive jack stands or other solid supports.
- Remember the battery and ignition cables carry high currents or voltages. Do not cause accidental short circuits.
- Make sure you have not left any tools or rags in the engine compartment before you close the hood.

**Always turn the ignition OFF when working in the engine compartment** (if the vehicle is equipped with automatic transaxle, the engine must be idling when checking the fluid level — see pages 85 and 86).

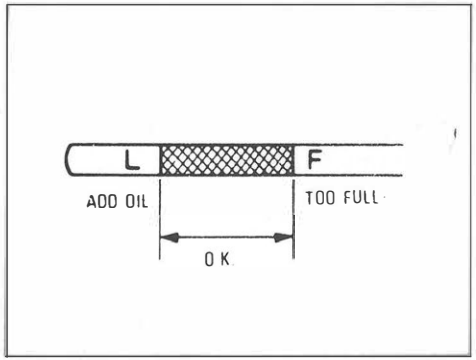
You should be aware that improper or incomplete servicing may result in operating problems. This section gives instructions only for those items that are relatively easy for an owner to perform. As explained in Section 6, there will still remain a number of items that must be done by a qualified mechanic with special tools.

## Electric engine cooling fan



***Your vehicle is equipped with a temperature controlled electrical cooling fan and when the ignition is on, the fan will automatically rotate if the engine coolant temperature is sufficiently high. Therefore, never work near the fan when the ignition is ON.***

## Checking the engine oil level




**With the engine at operating temperature and turned off, check the oil level on the dipstick.**

1. To get a true reading, the vehicle should be on a level surface. After turning off the engine, wait a few minutes for the oil to drain back into the bottom of the engine.

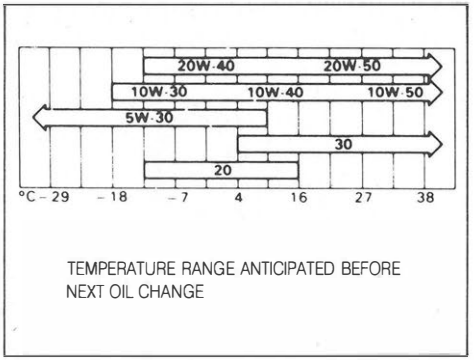
2. Extract dipstick, and wipe it clean with a rag.

3. Reinsert the dipstick — push it in as far as it will go or the reading will not be correct.

4. Pull the dipstick out and look at the oil level on the end. If it is between the "F" and "L" marks, it is all right. If the oil level is below the "L" mark (or even not showing on the dipstick), add oil up to the "F" line immediately.

Oil grade and viscosity recommendations are given above.

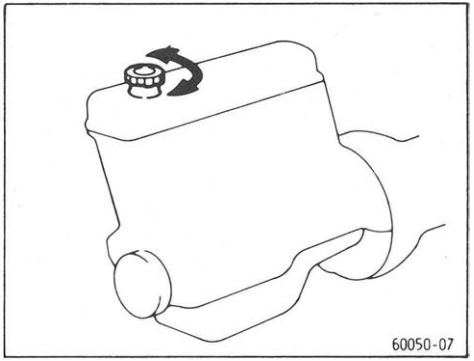
## Recommended viscosity (SAE)




**Recommended grade (API):**

SF, SG or better.

## Changing the engine oil and filter

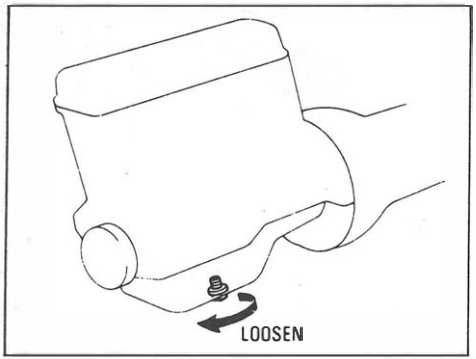



**1. Warm up the engine for a few minutes and then turn it off.**

a. Park the vehicle on a level surface. Warm up the engine until the needle on the temperature gauge is at least above the bottom mark. (warm oil will drain faster and more thoroughly). Turn off the engine.

b. Remove the oil filler cap. This allows air to enter the engine as the oil drains.

*continued overleaf*

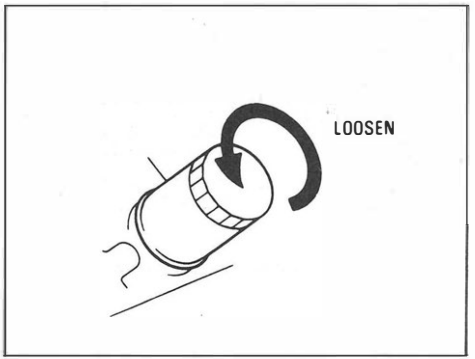



**2. Remove the drain plug and allow the oil to drain fully.**

a. Place a drain pan under the drain plug.

b. Using a wrench, remove the drain plug.

*The oil may be hot — be careful not to burn yourself.* Allow the oil to drain fully.




**3. Remove the old oil filter located on the side of the cylinder block that is facing the front of the vehicle and install a new one hand tight.**

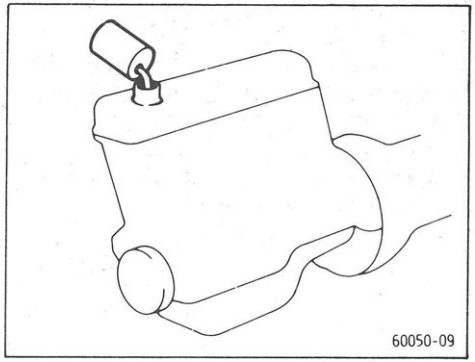
a. Using an oil filter wrench (any of several common types will work), loosen the oil filter. It turns counterclockwise. Once loose, you may unscrew it the rest of the way by hand. When removing it, hold up the end so that oil does not spill out.

b. With a clean cloth, wipe off the mounting surface on the engine so that the new filter will seat well. *Make sure that the old gasket has not stuck to the mounting surface.* If it has, remove it before installing the new filter.

c. Smear a little engine oil on the rubber gasket of the new oil filter.

d. Screw the new filter into place and tighten it until the gasket contacts the seat. Then give it additional 3/4 turn to seat the filter.

e. Reinstall the drain plug and gasket. Tighten the plug with your wrench, but do not force it and strip the threads.




**4. Add oil until the correct amount is registered on the dipstick and install the filler cap. Start the engine and check for leaks at the filter and drain plug.**

a. After adding the oil, make sure that the filler cap is installed hand-tight. You should double-check the oil level on the dipstick. Engine oil additives are neither needed nor recommended.

b. With the engine running, look carefully for any small leaks from around the oil filter or drain plug. Any leak indicates a faulty installation.

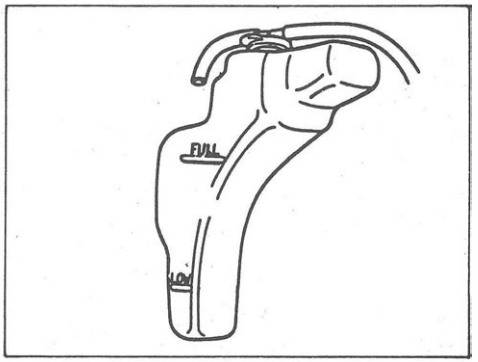
c. Turn the engine off and wait a few minutes. Check the oil level again and add oil if necessary.

*Used engine oil contains potentially harmful contaminants which may cause skin disorders, so care should be taken to avoid prolonged and repeated contact with it. To remove used engine oil from your skin, wash thoroughly with soap and water.*

*Do not leave used oil within the reach of children.*

*Dispose of used oil only in a safe and acceptable manner. Do not dispose of used oil in household trash, in sewers or onto the ground. Call your dealer or a service station for information concerning recycling or disposal.*

## Checking the engine coolant level




**Look at the see-through coolant reservoir tank. The coolant level is satisfactory if it is between the "FULL" and "LOW" lines on the tank.**

The coolant level in the reservoir tank will vary with engine temperature. However, if the level is on or below the "LOW" line, add coolant. Bring the level up to the "FULL" line.

When adding coolant, all you have to know is what kind of coolant is already in the cooling system. ***Always use the same type as already in the system*** (refer "Changing engine coolant" and "Winter driving tips"). If the coolant level drops within a short time

*continued overleaf*

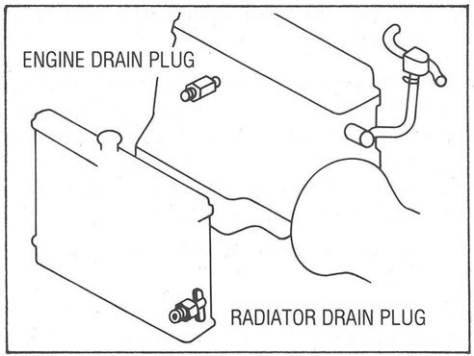
after replenishing, there may be a leak in the system. Visually check the radiator, hoses, radiator cap and water pump.

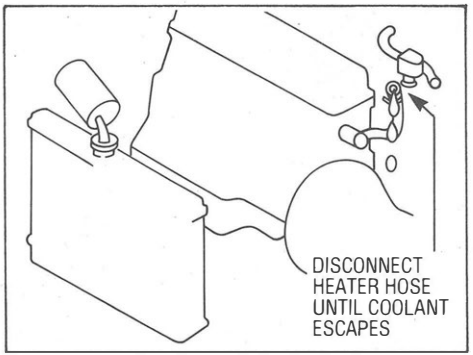
If no leak can be found, have the cap pressure tested at your Holden Dealer. **Do not remove the radiator cap when the engine is hot.**

**WARNING:**

**The level of the coolant in the see-through reservoir tank does not always indicate the coolant content of the sytem. If the engine is overheating or there has been a sudden loss of coolant, remove the radiator cap once the engine has cooled down and check the coolant level. The radiator must always be full to the top of the filler, refer to "If your car overheats".**

## Changing the engine coolant




**1. Drain the cooling system and flush it out with water once every 20,000 km or 12 months.**

To ensure the cooling system does not contain an air lock which could damage the engine after it has been refilled wih coolant, it is essential that the draining, flushing and refilling procedure given below, be followed carefully. Should you feel that the procedure is too difficult for you to do, your Holden Dealer will be pleased to do it for you.

**Draining procedure**

1. Ensure that engine is cool.
2. Remove radiator cap.
3. Open radiator drain plug.
4. Open engine drain plug.
5. Allow coolant to drain completely.

**Flushing procedure**

6. Insert mains pressure water supply hose into radiator through the filler neck.
7. Flush radiator until clear water flows from the lower radiator outlet.
8. Close off water supply.
9. Close radiator drain plug.
10. Open water supply and continue flushing until clear water runs from engine drain cock.
11. Close water supply and securely tighten drain cock.

**Refilling procedure**

12. ***Disconnect heater hose at heater tap neck and support open end at a level above opposite connected end.***

13. Move heater temperature control fully to the right.

14. Add 300ml of inhibitor meeting Holden's specification No. HN1791 to radiator.

***The use of radiator inhibitor HN 1791 is of primary importance when replacing the coolant in passenger vehicles. The chemical composition of the inhibitor is the product of many years of development by engineers. It prevents corrosion from taking place in the engine cooling system. Therefore, it must always be added when renewing engine coolant and never mixed with any other additive or anti-freeze (see "Winter driving tips").***

15. Add rainwater, demineralised or softened water to radiator, until water escapes from the heater hose.

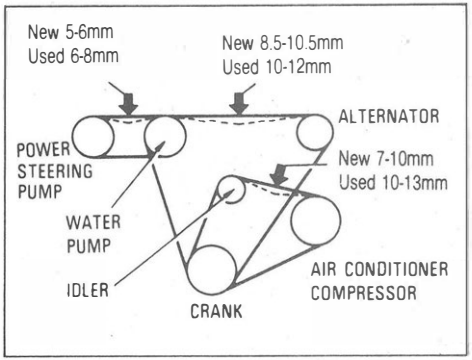
16. Reconnect heater hose and securely tighten clamp. Ensure hose is engaged fully onto heater tap neck.

17. **Refill radiator to top of filler neck and ensure the coolant reservoir is showing full.**

**Check procedure**

1. Start the engine and let it idle for approximately 6 minutes. Whilst idling, add clean water to radiator to maintain water level at full condition.
2. Turn off engine and reinstall radiator cap.
3. Check the cooling system for water leaks.
4. Road test the vehicle to confirm that normal operating temperature is not exceeded.
5. Stop engine and, taking care not to touch anything hot in the engine compartment, check again for water leaks.

## Checking the engine drive belts



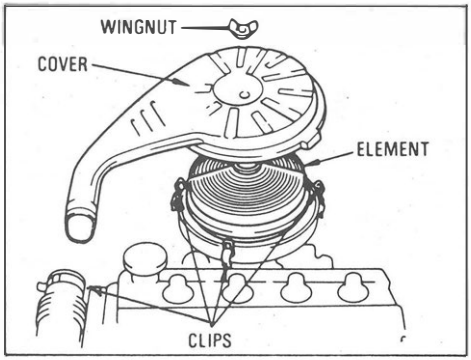

**Visually inspect the condition of the belts. Check their tension by applying thumb (10 kg load) pressure midway between the pulleys.**

a. With the engine turned off, check the belts for cracks, fraying, excessive wear or oil stains. Have belts in poor condition immediately replaced by your Holden Dealer.

b. With the thumb, press hard on each belt midway between the pulleys. Each belt should deflect no more than the amount shown in the illustrations. If a belt is loose, have it adjusted by your Holden Dealer.

**When the engine is hot, be careful not to touch the radiator or engine.**

## Checking and replacing the air cleaner element




**1. To inspect the element, unscrew the wingnut and release the clips. Then remove the cover and lift out the element.**

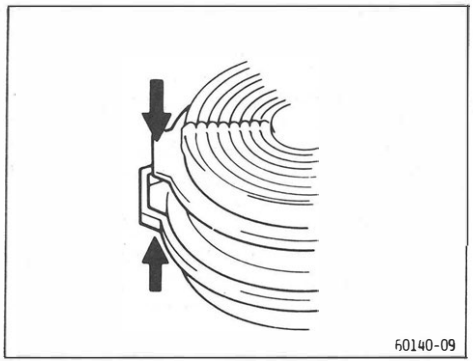
a. Unscrew the wingnut by hand.

b. Release each clip by lifting the wire tabs.

c. Remove cover and set it aside.

Lift the element out and inspect its outer surface. If it is dirty, it should be replaced.

Note: Do ***not*** wash or oil the element. ***Do not drive with the air cleaner removed.*** Backfiring could cause a fire under the hood.



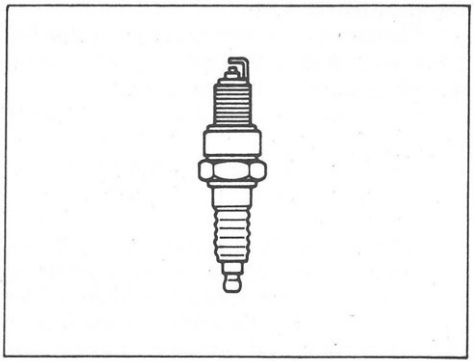

**2. To install an element, align the tabs on the case, element and cover.**

Before installing, remove any dust from where the element seats.

Do not overtighten the wingnut, or the carburetor may be damaged.

*Do not drive with the air cleaner removed*, or excessive engine wear could result. Also backfiring could cause a fire in the engine compartment.

## Removing spark plugs

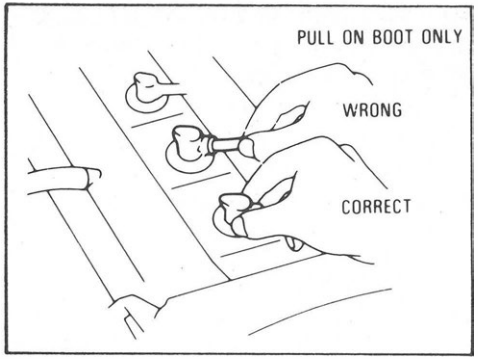


**Always use the recommended spark plugs or equivalent when replacing. The use of the other plugs will cause engine damage or loss of performance.**

**4A and 6A engines**

| | |
|---|---|
| Nippondenso | QJ16AR-U11 |
| NGK | BCRE52Y11 |

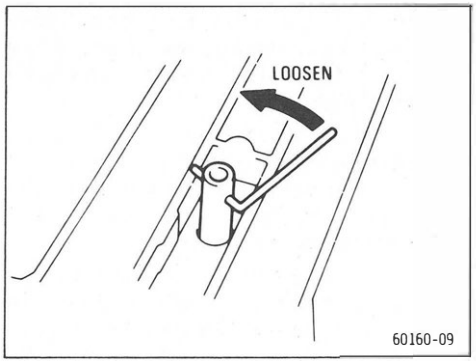
## Removing spark plugs




**1. Unfasten the spark plug cables by pulling on the boot, not on the cable itself.**

a. Note the order of the spark plug cables. If you are not positive that you can reconnect them correctly, mark each cable with a number on a piece of tape before disconnecting it.

b. Unfasten the connector by pulling straight up. Pulling on the cables may break the carbon conductor inside. ***The boots may be hot, so be careful***.

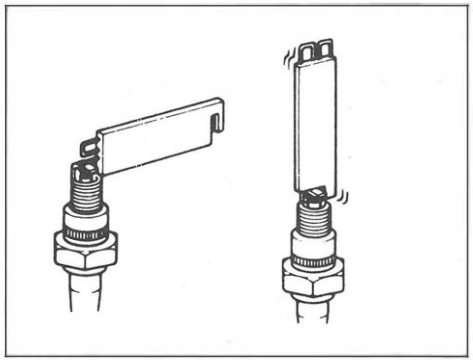



**2. Unscrew and remove the old spark plugs.**

a. Keep the plugs in order as you remove them. ***The spark plugs may be hot, so be careful.*** If the plug condition is normal, discard the plugs. One clue to judging the plug condition is the deposits. If the plugs have anything other than brown to light tan (or grey) deposits on them, that may indicate the engine needs adjustments or repairs. Save them and show them to your Holden Dealer.

b. Make sure that no metal gaskets were accidentally left in place. A double gasket could cause leakage. ***Do not allow dirt or anything else to fall through the spark plug holes.***

## Check the plug gap



**3. Set the gap on the new plugs to the correct clearance, and install them. Reconnect the spark plug cables in correct order.**

a. Check the gap by passing the feeler gauge between the electrodes on the spark plug. If the gap is correct, you will feel a slight drag. If necessary, bend the outer electrode to obtain the right clearance. ***Do not pry against the centre electrode.***

b. First screw in the plugs by hand. Tighten with a spark plug wrench, being careful not to strip the threads. Do not overtighten them.

c. Make sure the cables are installed in the correct order. The connector fastens on by pushing it squarely over the end of the plug.

## Checking battery condition and fluid level

### BATTERY PRECAUTIONS

**The battery produces an inflammable and explosive hydrogen gas. Therefore:**

- Do not allow tools to cause sparks by letting them ground (earth) the positive terminal.
- Do not smoke or light a match near a battery.
- Always charge your battery in an unconfined area. Do not charge or use the battery for other purposes in a garage or closed room where there is not sufficient ventilation.

**The electrolyte contains poisonous and corrosive sulphuric acid.**

- Avoid contact with eyes, skin or clothes.
- Never ingest electrolyte.
- Wear protective safety glasses when working near a battery.
- Keep children away from batteries.

### EMERGENCY MEASURES

- If electrolyte gets in your eyes, ***flush your eyes with clean water for at least 15 minutes and get immediate medical attention.*** If possible, continue to apply water with a sponge or cloth while en-route to the medical treatment.
- If electrolyte gets on your skin, ***thoroughly wash the contacted area. If you feel a pain or burn, get medical attention immediately.***
- If electrolyte gets on your clothes, there is a possibility of it soaking through to your skin so **immediately take off the exposed clothing and follow the procedure above, if necessary.**
- If electrolyte is swallowed, ***drink a large quantity of water or milk. Follow with milk of magnesia, beaten raw egg or vegetable oil. Then go immediately for emergency help.***

### BATTERY HANDLING PRECAUTIONS

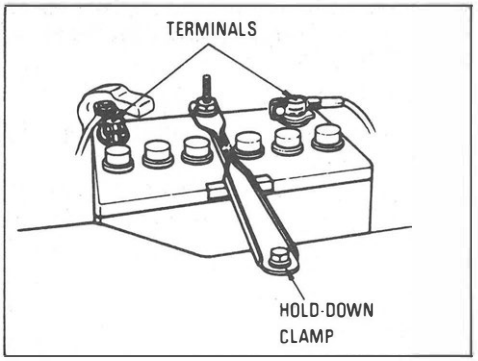
- Before performing maintenance on your battery or recharging it, turn off all accessories, stop the engine and remove the vent caps.
- When removing and reinstalling the battery, the ground (earth) cable should be removed first and installed last.

### BATTERY RECHARGING PRECAUTIONS

**During recharging, the battery is producing hydrogen gas.**

Therefore, before recharging:

1. Remove the battery from the car and remove the vent caps.
2. Be sure the power switch on the charger is OFF when connecting the charger cables to the battery and when disconnecting them.
3. If recharging with the battery installed in the car, be sure to disconnect the ground cable (earth).



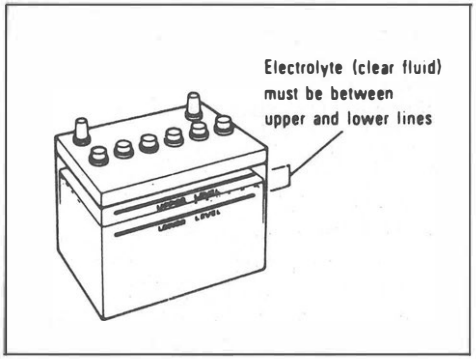

**1. Check the battery for corroded or loose connections, cracks, or loose hold-down clamps.**

**The fumes generated by the battery can be explosive. Therefore, do not allow open flames, sparks, or smoking nearby.**

a. If the battery is corroded, wash it off with a solution of warm water and baking soda. Coat the outside of the terminals with grease to prevent further corrosion.

b. If the connections are loose, tighten the clamp bolts — but do not overtighten.

c. Tighten the hold-down clamp only enough to keep the battery firmly in place. Over-tightening may damage the battery case.



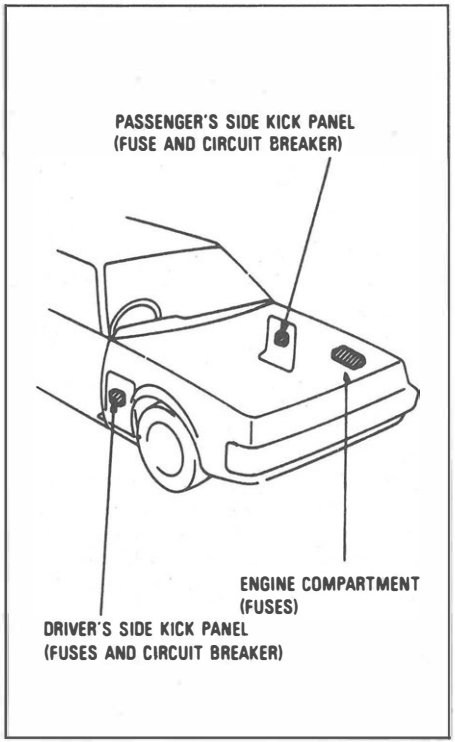

**2. Check the electrolyte level as shown above. If the level is low, add distilled water.**

a. When checking the electrolyte level, look at all six cells, not just one or two.

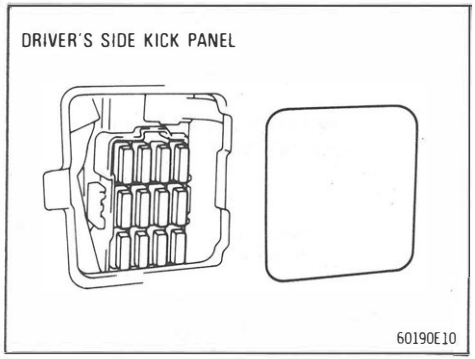
b. Use only distilled water to replenish the battery. ***Do not overfill*** — the electrolyte may squirt out of the battery during periods of heavy charging, causing corrosion or damage.

c. After replenishing, be sure to securely retighten the filler/vent caps.

## Fuse and circuit breaker locations



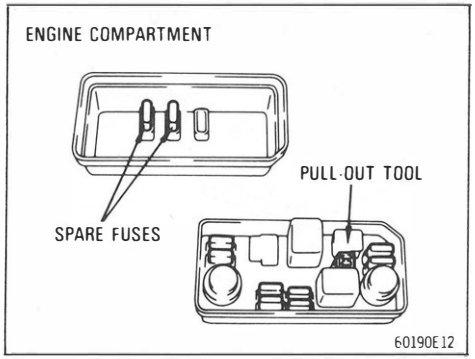
## Checking and replacing fuses




**1. Turn the ignition switch off and open the fuse box lid.**

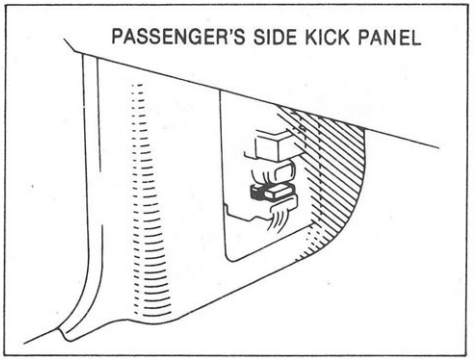
If any light or electrical component does not work, your vehicle may have a blown fuse.

Determine which fuse may be causing the problem. The lid of the fuse box shows the name of the circuit for each fuse (this information is also given in Section 9).




**2. Be sure the inoperative component is off. Pull a suspected fuse straight out with the pull-out tool and check it. If it has blown, push a new fuse into the clips.**

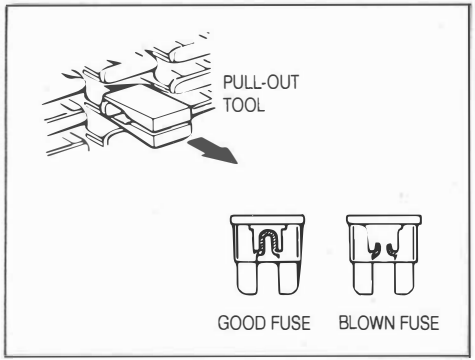
a. Look carefully at the fuse. If the thin wire is broken, the fuse has blown. If you are not sure or if it is too dark to see, try replacing the suspected fuse with one you know is good.




b. Install only a fuse with an amperage rating designated on the fuse box lid. ***Never use a fuse with a higher amperage rating or some other object in place of a fuse.***

c. If the new fuse immediately blows out, there is a problem with the electrical system. Have your Holden Dealer correct it as soon as possible

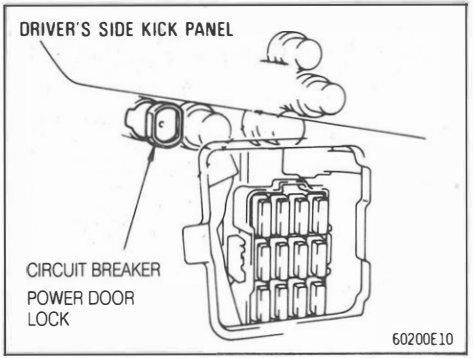
## Checking the circuit breakers




If you do not have a spare fuse, in an emergency you can pull out the "CIG", "RADIO", "DOME", "A/C" or "HEATER" fuse, which may be dispensable for normal driving, and use it if its amperage rating is the same.

If you cannot use one of the same amperage, use one with a lower than, but as close as possible to, the same rating. If the amperage is lower than that specified, the fuse might blow out again but this does not indicate anything wrong. Be sure to get a correct fuse as soon as possible and return the substitute to its original clips.

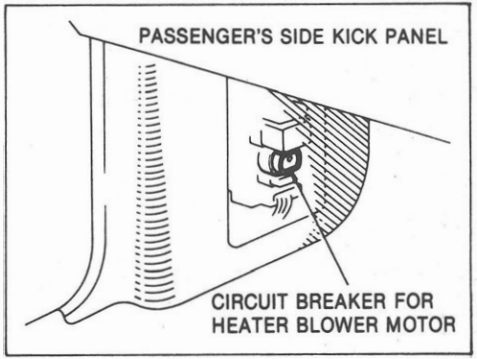
NOTE: It is a good idea to purchase a set of spare fuses and keep them in your vehicle for emergencies.



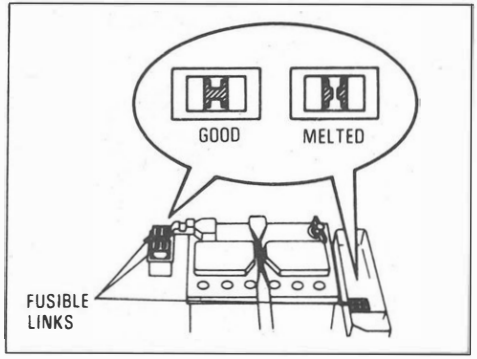

**If the power door lock or heater blower motor does not operate, check the relevant circuit breaker (C.B.)**

a. To reset the circuit breaker, first turn the ignition switch off and carefully insert a thin object, such as a toothpick, needle or saftey pin, into the hole in the circuit breaker until you hear a click. The component should now operate. This may be done without removing the circuit breaker.

b. If the circuit breaker immediately goes off again or the component does not operate, turn off the component switch and have the electrical system checked by your Holden Dealer as soon as possible.



## Checking the fusible links



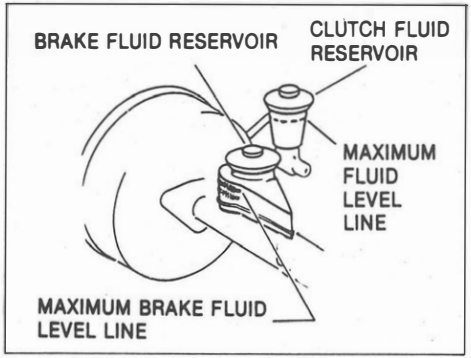

**If the headlights or other electrical components do not work and the fuses are all right, check the fusible links. If any have melted, they must be replaced.**

*Always use a genuine Holden fusible link for replacement. Never install a wire — even for a temporary fix. It may cause extensive damage and possibly a fire.*

If there is an overload in the circuits from the battery, the fusible links are designed to melt before the entire wiring harness is damaged.

*Before replacing the fusible links, the cause of electrical overload should always be determined and repaired by your Holden Dealer.*

## Checking brake and clutch fluid

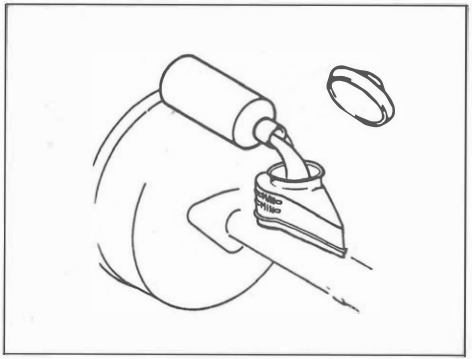



**To check the fluid levels, simply look at the see-through reservoirs. The level should be within 10 mm of the maximum fluid level line.**

It is a good habit to check these fluid reservoirs every time you check the engine oil level.

It is normal for the brake fluid level to go down slightly as the front brake pads wear. So be sure to keep the reservoirs filled.

If any reservoir needs frequent refilling, it may indicate a serious mechanical problem.

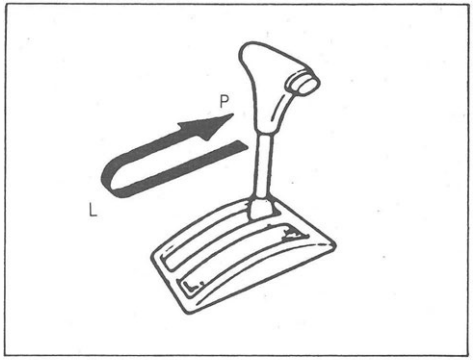


**If the level is low, add FMVSS No116 DOT-3, SAE J1703 or AS1960 Grade 1 brake fluid only, to the brake or clutch reservoir.**

**Use caution in filling the reservoirs because brake fluid can harm your eyes and damage painted surfaces.**

Do not use brake fluid that has been opened for more than 6 months or that has had the cap left off. Brake fluid absorbs moisture from the air, and excess moisture can cause a dangerous loss of braking. Also, for this reason you should have the brake fluid drained and replaced periodically. Remove and replace the reservoir covers by hand.

## Checking automatic transaxle fluid level



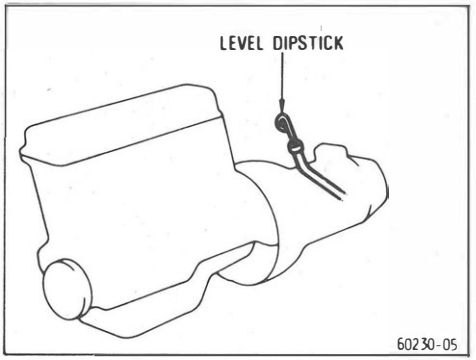

**1. Check the fluid level only when the transaxle is hot (normal operating temperature). With the vehicle level, first set the parking brake and then start the engine. While the engine is idling, depress the brake pedal and shift into each range from "P" to "L" and return to "P".**

If the vehicle has been driven over 16 km (24 km in frigid temperatures), the fluid temperature will be high enough (70°C-80°C) for the level to be checked.

When the vehicle has not been driven for over 5 hours and the transaxle fluid temperature is between 20°C and 30°C, a cold fluid level check can be made.

However, checking a cold transaxle is to transaxle must be checked again for correct level at normal operating temperature.

NOTE: If the vehicle has just been driven for a long time at high speed or in city traffic in hot weather, or if the vehicle has been pulling a trailer, the accurate fluid level cannot be obtained. Check the level after the fluid has cooled down (about 30 minutes).




**2. With the engine still idling, check the fluid level and condition on the dipstick. If necessary, add Dexron II automatic transmission fluid.**

*When the engine is running, keep hands and clothing away from the moving fan and engine drive belts.*

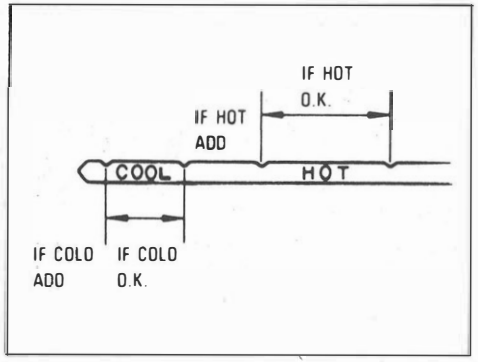
a. Pull out the dipstick and wipe it clean.

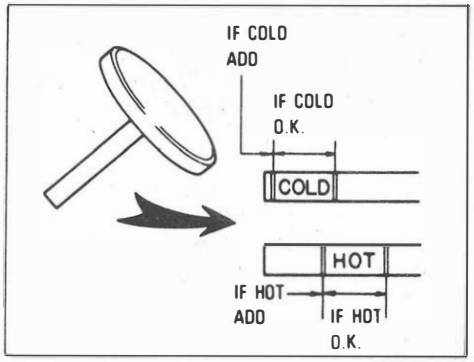
*Be careful not to touch the hot exhaust manifold.*

b. Reinsert the dipstick — push it in as far as it will go.

*continued overleaf*

## Checking power steering fluid




c. Pull the dipstick out and look at the fluid level. If the transmission is cold, the level should be in the "COOL" range on the dipstick. Similarly, if it is hot, the fluid level should be in the "HOT" range. If the level is at the low side of either range, add Dexron II automatic transmission fluid. (Fluid is added through the dipstick tube, using a funnel.)

*Keep the fluid at the correct level.* Over-filling may cause transmission damage and low fluid may cause slipping.

d. While checking the fluid level, also check the condition. If the fluid is black or if it smells burnt, have it changed.

**Check the fluid level on the dipstick. If necessary, add ATF Type Dexron II fluid.**

**Refer "Engine compartment over-view" for location of power steering reservoir.**

If the vehicle has been driven around 80 km/h for 20 minutes (a little more in frigid temperatures), the fluid is hot (60°C-80°C). You may also check the level when the fluid is cold (about room temperature 10°C-30°C) if the engine has not been run for about five hours.

a. Clean all dirt from outside of the reservoir tank. ***This reservoir tank may be hot so be careful not to burn yourself.***

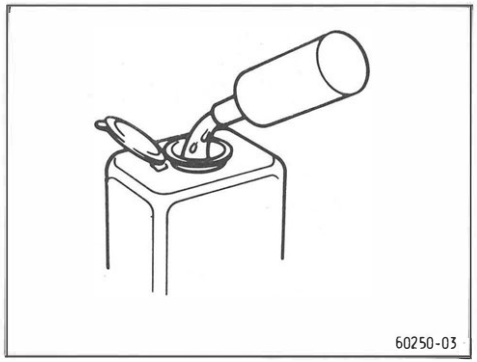
b. Remove the filler cap by turning it counter-clockwise and wipe the dipstick clean.

c. Reinstall the filler cap.

d. Remove the filler cap again and look at the fluid level. If the fluid is cold, the level should be in the COLD range on the dipstick. Similarly, if it is hot, the fluid level should be in the HOT range. If the level is at the low side of either range, add ATF Type Dexron fluid, ***but do not overfill.***

e. After replacing the filler cap, visually check the steering box case, vane pump and hose connections for leaks or damage.

## Adding washer fluid




**If a screen washer does not operate, the screen washer bottle could be empty. Check the bottle and, if necessary, add washer fluid.**

Tap water or clean rain water is a satisfactory washer fluid. However, if you drive during freezing conditions, the washer water might freeze. To ensure this does not occur, add a washer fluid that contains anti-freeze. ***(Do not use engine anti-freeze because it may damage the paintwork.)*** Always read and follow the instructions given on the windscreen washer fluid container. Normal household detergents are not suitable as they may damage the washer pump and rubber wiper blade elements.

Check the washer jets regularly for cleanliness and alignment.

***Do not operate the windscreen wipers on a dry windscreen or scratching may result.***

## Windscreen wiper blades

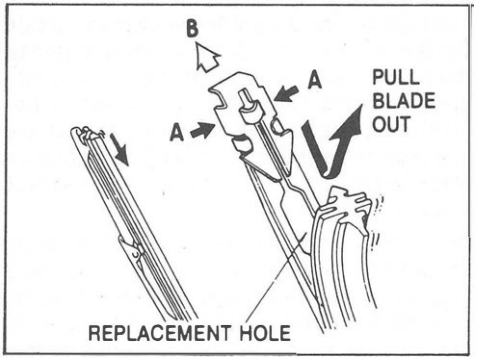
The rubber elements of the windscreen wiper blades are subject to harsh environmental conditions and wear, particularly in dusty areas and this can result in a smeary wipe. Therefore, the rubber element should be checked regularly and be replaced once or twice each year, preferably prior to the wet season.

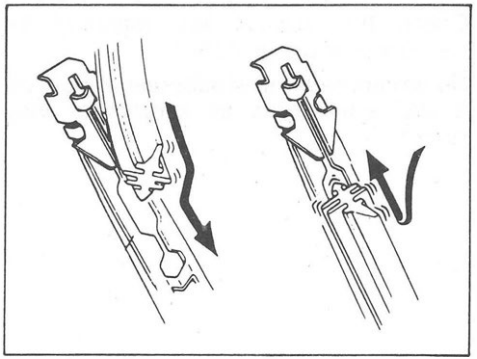
At the same time, the metal parts of the blade should be checked for wear and distortion and replaced if necessary. For long storage periods, the blades should be lifted clear of the windscreen by placing the arms in the "lock back" position.

### Windscreen and rubber element cleanliness

The windscreen and blade elements should be cleaned regularly using a suitable windscreen washer solvent. This removes contamination and road scum thus reducing the tendency for blade shudder and ensures clear vision.

## Replacing the wiper blades



**When the wipers no longer clean adequately, the wiper blades may be worn or cracked requiring replacement**

a. Lift the wiper blade clear of the windscreen by placing the arms in the "lock" back position.

b. Push the bottom end of wiper rubber inward until it is free of the metal backing strip retaining clip and you can see the replacement hole.

c. Pull the wiper blade out of the replacement hole.

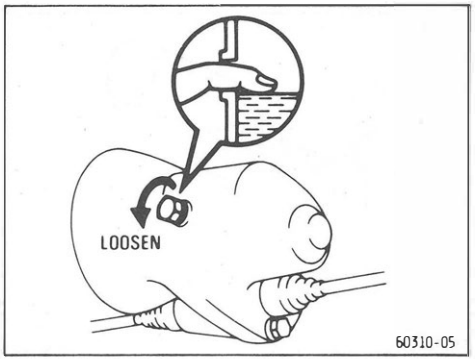
Note: If metal backing strip needs replacing, squeeze retaining clip at points "A" and, whilst still squeezing, pull clip in direction of "B". The backing strip can then be removed.

d. To install a new rubber, insert the end of the rubber into the replacement hole, and work the rubber along the slot in the blade backing strip.

e. Once all of the rubber is in the frame slot, pull it over the backing strip retaining clip and spread the rubber evenly along the strip.

f. Fold the wiper arm back to the working position.

## Checking manual transaxle oil



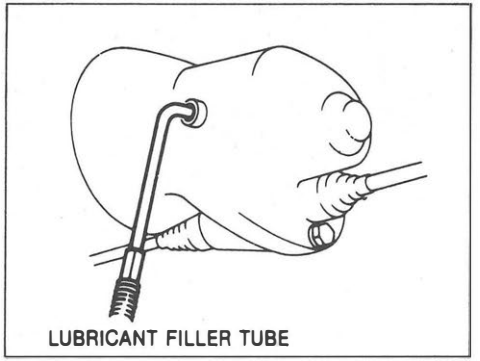

**Remove the filler plug and feel inside the hole with your finger. The oil should come to the bottom edge of the hole. If the level is all right, reinstall the plug and tighten it.**

***Caution: This check must be carried out only when the gear oil is cold, never insert fingers after the car has been driven as the oil may be hot.***

a. Make sure the car is level while making this check.

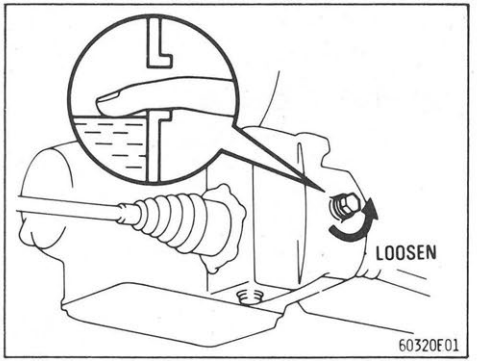
b. After installing the plug, visually check the transaxle case for leaks or damage.

## Checking differential fluid (automatic transaxle) — *3 speed automatic only*




**If the level is low, add multi-purpose gear oil (API GL4 or GL5) until it begins to run out of the filler hole. Reinstall the plug securely**

Recommended viscosity (gear oil) 75W-90 or SAE 80W-90.

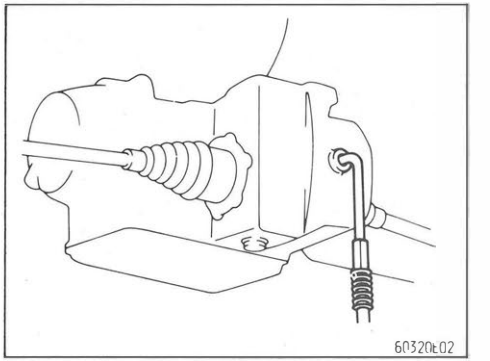



**Remove the filler plug and feel inside the hole with your finger. If the fluid comes to the bottom edge of the hole, the level is correct. Reinstall the plug.**

***Caution: This check must be carried out only when the fluid is cold, never insert fingers after the car has been driven as the oil may be hot.***

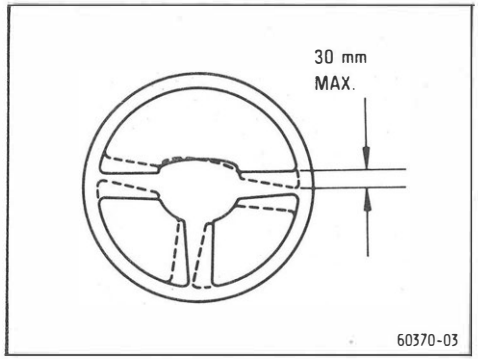
a. Make sure the vehicle is parked on a level surface.

b. After installing the plug, visually check the differential for leaks or damage.




**If the level is low, add Dexron II automatic transmission fluid until it begins to run out of the filler hole. Reinstall the plug.**

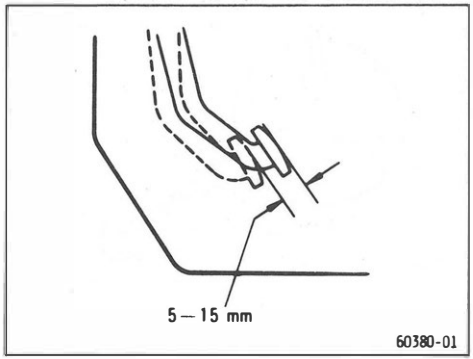
## Checking steering wheel freeplay




**With the vehicle stopped and the front wheels pointed straight ahead, rock the steering wheel gently back and forth. If the freeplay is more than specified, have it inspected by your Holden Dealer.**

Use only a very light finger pressure to rock the wheel slowly.

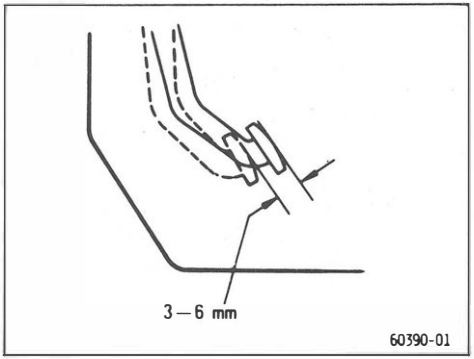
## Checking clutch pedal freeplay




**Press down lightly on the clutch pedal and measure the distance it moves freely before the clutch resistance is felt. The freeplay should be within the above limits.**

If the freeplay is more or less, have your Holden Dealer adjust the clutch.

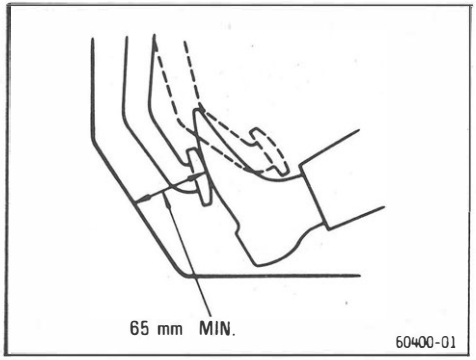
## Checking brake pedal freeplay




**With the engine stopped, first reduce the vacuum in the booster by depressing the brake pedal several times. Then lightly and slowly press down on the pedal with your fingers and measure the distance it moves before slight resistance is felt.**

If the freeplay is more or less than specification, have your Holden Dealer adjust the brakes.

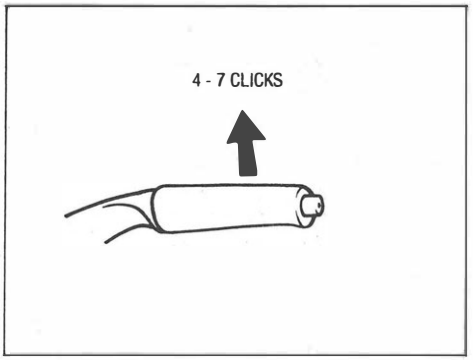
## Checking brake pedal clearance




**With the engine running, have some-one press the brake pedal several times and then press hard on it. The distance from the asphalt sheet to the top surface of the pedal should not be less than specified.**

If the clearance is less, have your Holden Dealer adjust the brakes.

## Checking parking brake adjustment




**Count the number of clicks as you slowly pull on the parking brake as far as it will go. The adjustment is correct if you hear the number of clicks specified above.**

If you count more or less clicks, have the parking brake adjusted by your Holden Dealer.

## Checking the brake booster and master cylinder

**Sit down in the driver's seat and follow the instructions given below. If your brakes do not operate as described, have them checked at your Holden Dealer.**

1. ***With the engine stopped, press the brake pedal several times:*** the travel distance should not change.

2. ***With the brake fully depressed, start the engine:*** the pedal should move down a little when the engine starts.

3. ***Depress the brake, stop the engine, and hold the pedal in for about 30 seconds:*** the pedal should neither sink or rise.

4. ***Restart the engine, run it for about a minute and turn it off. Then firmly depress the brake several times:*** the pedal travel should decrease with each application.

## Headlight units and driving lamp bulbs

It is recommended that headlight units be replaced by your Holden Dealer as they may need realignment if disturbed.

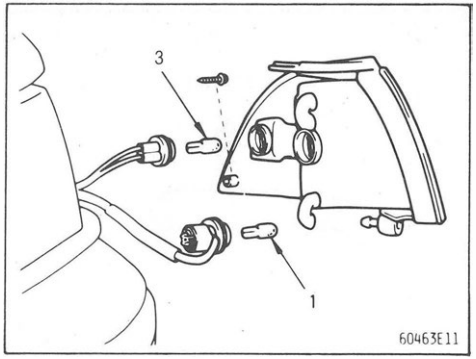
### Replacing light bulbs

The illustrations show how to gain access to the bulbs. *When replacing a bulb, make sure the light switch is off. Use only a bulb with the same wattage rating.* The wattage ratings are given below.

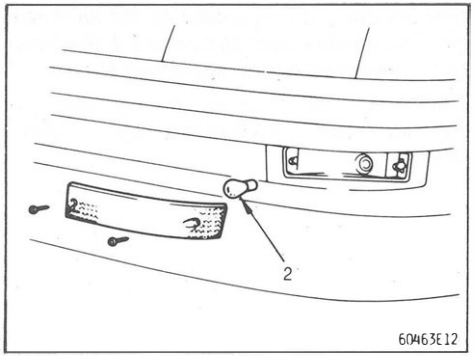
The single end bulbs are removed by pressing in and turning counterclockwise. The double-end bulbs (*) or wedge base bulbs (**) pull straight out of the holder clips.

| No. | Light Bulbs | Wattage |
|---|---|---|
| 1 | Parking lights ** | 5 |
| 2 | Front turn signal lights | 21 |
| 3 | Side turn signal lights ** | 5 |
| 4 | Rear turn signal lights | 21 |
| 5 | Stop and tail lights | 21/5 |
| 6 | Back-up lights | 21 |
| 7 | Licence plates lights ** — Hatchback and Sedan | 5 |
| 9 | Interior light * | 10 |
| 10 | Luggage compartment light * | 5 |
| 11 | Trunk room light ** | 5 |
| 12 | Centre brake light | 21 |

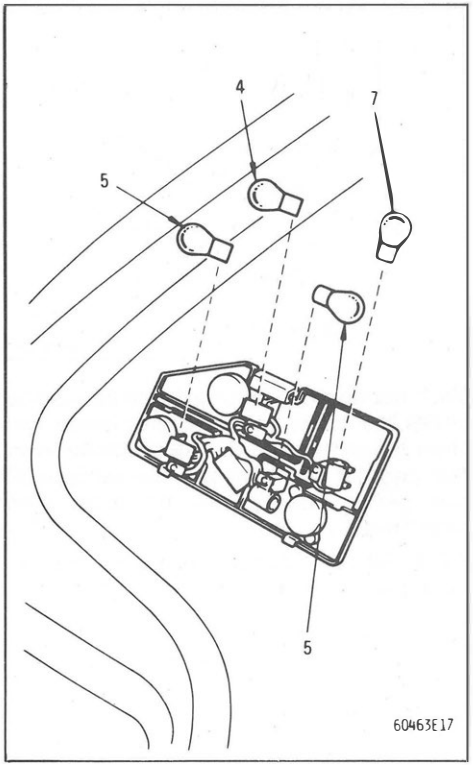
## Replacing light bulbs



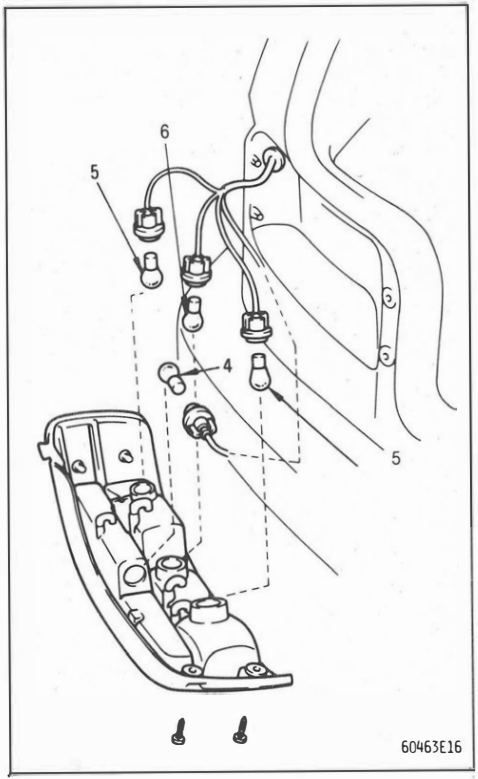

ALL MODELS: Parking and side turn signal lights



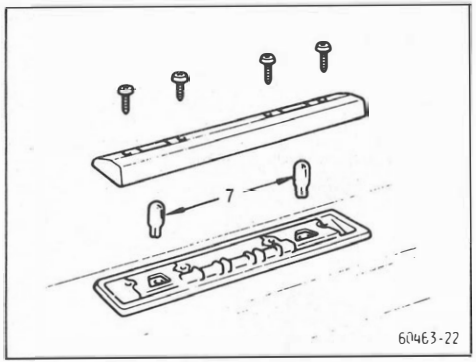

ALL MODELS: Front turn signal lights



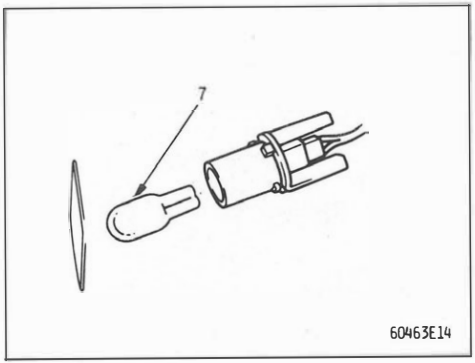

SEDAN: Rear turn signal, stop and tail, and back up lights



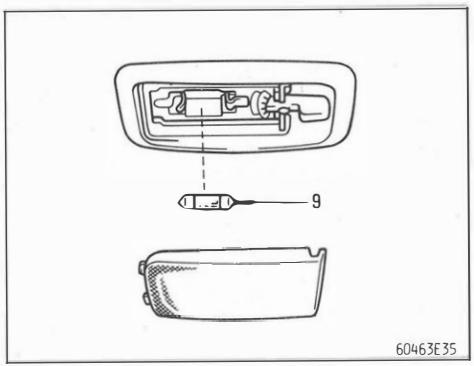

HATCHBACK: Rear turn signal, stop and tail, and back up lights



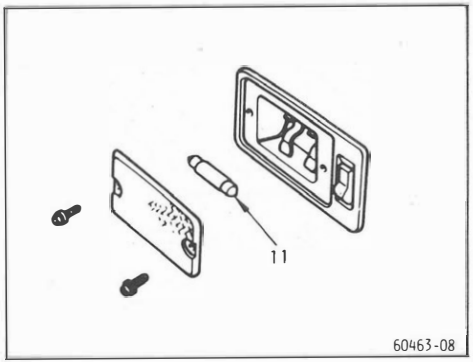

HATCHBACK: Licence plate lights




SEDAN: Licence plate lights

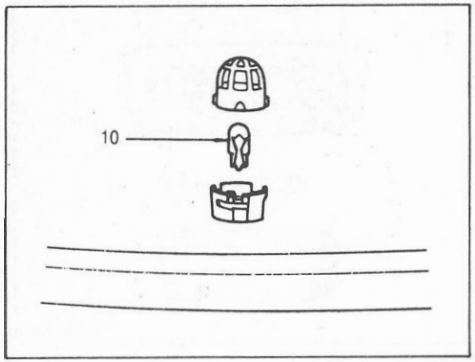



ALL MODELS: Interior light

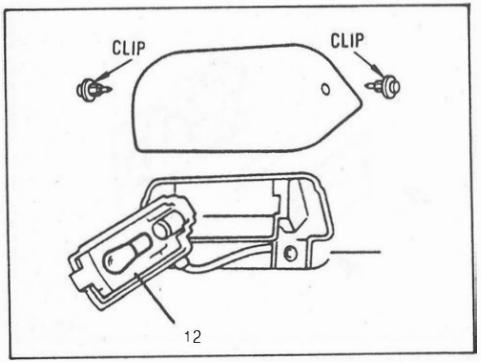



HATCHBACK: Luggage compartment

*continued overleaf*

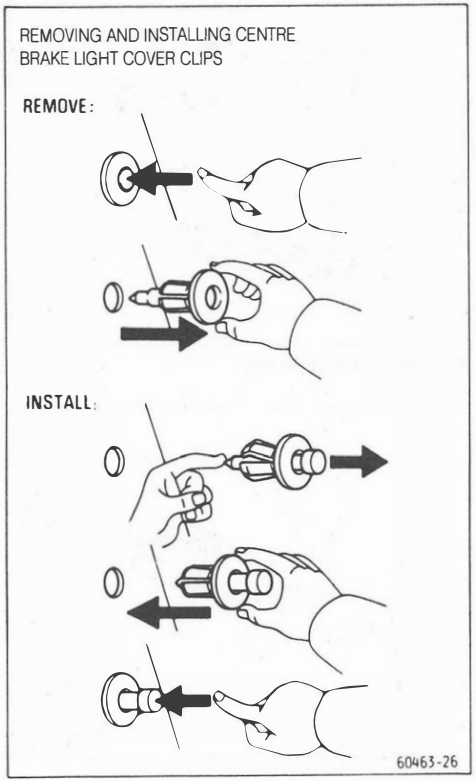



SEDAN: Trunk room light




HATCHBACK AND SEDAN: Centre brake light

REMOVING AND INSTALLING CENTRE BRAKE LIGHT COVER CLIPS



## Tyre information

**The recommended cold tyre pressures and tyre sizes are shown on the tyre plaque located on the rear end of the drivers door.**

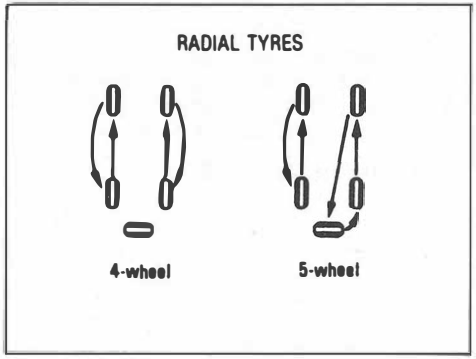
You should check the tyre pressures at least once a month. (And do not forget the spare!) Incorrect tyre pressure can reduce tyre life and make your car less safe to drive.

**Low tyre pressure** results in excessive wear, poor handling, reduced fuel economy, and the possibility of blowouts from over heated tyres.

**High tyre pressure** produces a harsh ride, handling problems, excessive wear at the centre of the tyre tread, and a greater possibility of tyre damage from road hazards.

These instructions for checking tyre pressure should be observed:

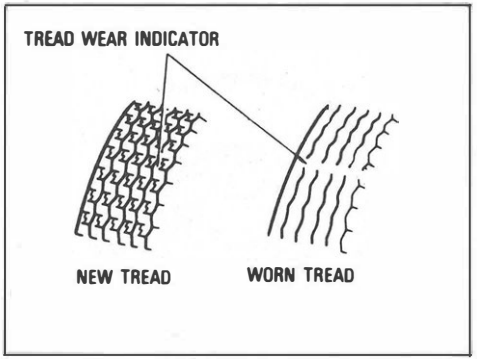
- **The pressure should be checked only when the tyres are "cold".** Pressures should be checked in early morning, preferably before the vehicle has covered 1 kilometre.
- **Always use a tyre pressure gauge.** The appearance of tyres can be mis-leading. Besides, tyre pressures that are even just a few kilopascals (kPa) off, can degrade handling and ride.




**To equalise tyre wear, rotate the tyres every 10000 km.**

Including the spare in the rotation will extend the initial replacement period. However, rotating without the spare means that when replacement time comes, you will only have to buy three new tyres to match the spare, which will be unused. The choice is yours.

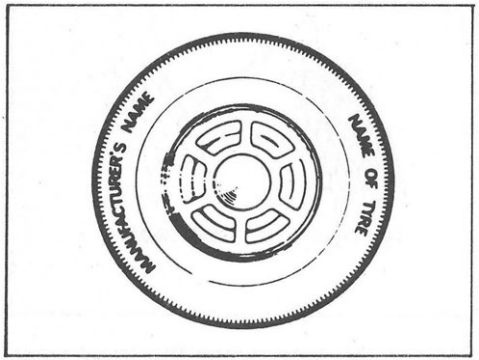
When rotating tyres, check for uneven wear and damage. Abnormal wear is usually caused by incorrect tyre pressure, improper wheel alignment, out-of-balance wheels, or severe braking.




**Replace the tyres when the tread wear indicators show.**

The tyres on your Holden have built-in tread wear indicators to help you know when the tyres need replacement. If you can see the indicators in two or more adjacent grooves, the tyre should be replaced.

*continued overleaf*




**When replacing a tyre, use only the same size and construction as originally installed and with the same or greater load capacity (refer tyre plaque on end of driver's door).**

Using any other size or type of tyre may seriously affect ride, handling, speedometer and odometer calibration, ground clearance, and clearance between the body and tyres.

**Do not mix radial and cross ply tyres on your car.** It can cause dangerous handling characteristics.

**If you have tyre damage such as cuts, splits, cracks deep enough to expose the fabric, and bulges indicating internal damage, the tyre should be replaced.**

Tyres with questionable damage should be examined by an expert.

If an air loss occurs while driving, do not continue driving with deflated tyre. Driving even a short distance can damage a tyre beyond repair.

**When replacing wheels for some reason, care should be taken to ensure that the wheels are equivalent to those removed in load capacity, diameter, rim width, and offset.**

Correct replacement wheels are available at your Holden Dealer.

**If you need to replace the tyres due to wear or damage, the following precautions should be observed when installing the tyre on wheel.**

- ***Lubricate wheel and beads with soapy water or tyre mounting lubricant.***
- ***To properly seat tyre on rim, inflate tyre to a maximum of 340-390 kPa.***
- ***Adjust inflation to recommended pressure.***

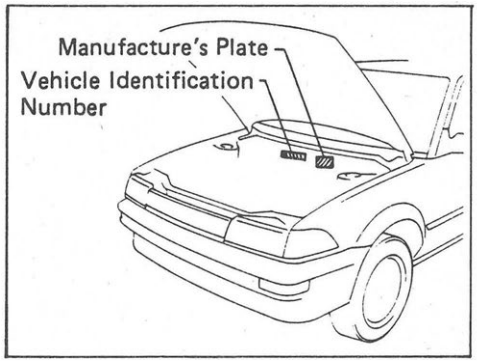
## Snow Chains

**Regulations regarding the use of snow chains vary according to state or type of road, so always check them before installing chains.**

To prevent chain damage to your car:

1. Install the chains as tightly as possible, and retighten them after driving about 500 metres.
2. Do not exceed 50 km/h, or the chain manufacturer's recommended speed limit.
3. Drive carefully avoiding bumps, holes, and sharp turns, which may cause the vehicle to bounce.
4. Follow the instructions of the chain manufacturer.

## Your Holden's identification

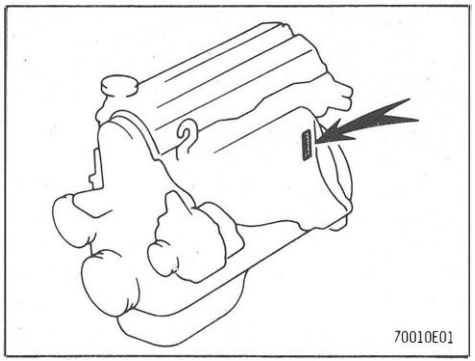



**Vehicle Identification Number (VIN) is stamped on the engine compartment bulkhead.**

The manufacturer's plate, mounted on the same bulkhead, contains VIN, Model data and date of manufacture (see below).

*Date of manufacture means:—*

*The date of manufacture, hereinafter called the "Built Date" is the calendar month and year in which the body shell and power train sub-assemblies are conjoined and the vehicle is driven or moved from the production line.*




**The engine number is stamped on the engine block as shown above.**

# Specifications — Section 9

## ENGINE

**Models:**

6A-F and 4A-F

**Type:**

4 cylinder in line, 4 cycle petrol engines.

**Bore and stroke (mm):**

6A-F engine
76.0 X 77.0
4A-F engine
81.0 X 77.0

**Displacement:**

6A-F engine
1397 cc
4A-F
1587 cc

**Fuel required:**

Unleaded petrol only

**Fuel tank capacity:**

50 litres (all models)

**Drive belt deflection with 10 kg thumb pressure:**

Crankshaft/Water pump/Alternator
New belt: 8.5-10.5mm
Used belt: 10-12mm
Crankshaft/Air conditioner
Compressor/Idler
New belt: 7-10mm
Used belt: 10-13mm
Water pump/Power steering pump
New belt: 5-6mm
Used belt: 6-8mm

**For the following specifications, refer to Emission Control Label located on the underside of the vehicle hood.**

Spark plug gap
Valve clearance
Ignition timing
Engine idle speed

## ENGINE LUBRICATION

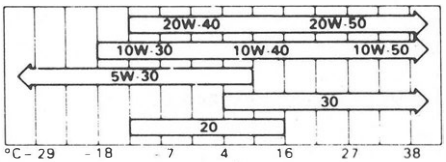
**Oil capacity, litres:**

Dry fill 3.7
Drain and refill.
With filter 3.3
Without filter 3.0

**Oil grade (API):**

SF, SG or better

Recommended oil viscosity (SAE)




TEMPERATURE RANGE ANTICIPATED BEFORE NEXT OIL CHANGE.

## COOLING SYSTEM

**Total capacity, litres:**

6A-F and 4A-F engines: 6.0

**Coolant type:**

95% water and 5% inhibitor (meeting Holden's specification No. HN1791. Part No. 0881200025A

**Clutch**

Pedal free play 5–15mm
Fluid type: FMVSS No 116 DOT 3, SAE J1703, or AS1960, Grade 1

## MANUAL TRANSAXLE

**Oil capacity, litres:**

4 speed 2.7
5 speed 2.6

**Oil type:**

Multipurpose gear oil
API GL-4 or GL-5

**Recommended oil viscosity:**

SAE 80W or 75W90

## AUTOMATIC TRANSAXLE

**Fluid capacity, litres (3 speed transaxle):**

Dry fill 5.5

Drain and refill — up to 2.5

**Fluid type:**

Automatic transmission fluid, Dexron II

**Fluid capacity, litres (3 speed with overdrive transaxle):**

Dry fill 7.2
Drain and refill — up to 3.1

**Fluid type:**

Automatic transmission, fluid, Dexron II

## DIFFERENTIAL (AUTOMATIC TRANSAXLE) — *3 SPEED TRANSAXLE ONLY*

**Fluid capacity, litres:**

1.4

**Fluid type:**

Automatic transmission fluid, Dexron II

## BRAKES

**Minimum pedal clearance when depressed:**

65mm

**Pedal freeplay:**

3-6mm

**Parking braking adjustment:**

4-7 clicks

**Fluid type:**

FMVSS No116 DOT 3,
SAE J1703, or AS1960
Grade 1

## STEERING

**Wheel free play:**

Less than 30mm

## BATTERY

**Specific gravity reading at 20°C:**

| | |
|---|---|
| 100% Charged | 1.260 |
| 80% Charged | 1.235 |
| 50% Charged | 1.180 |
| Discharged | 1.060 |

**Charging rates:**

Quick charge 15A max
Slow charge 5A max

**GROSS VEHICLE WEIGHT (G.V.W.)**
**kg**

| Model / Trans | Sedan | Hatch Back |
|---|---|---|
| W/O 4sp A/T* | 1480 | 1480 |
| W 4sp A/T* | 1520 | 1520 |

*W/O = Without
4sp A/T = Four speed automatic transaxle
W = With

**MAXIMUM TOWING LOADS**

Trailer with brakes: 850 kg
Trailer without brakes: 400 kg
Tow ball vertical load: 50 kg

Note:
Tow ball load is specified under following conditions and assumptions:

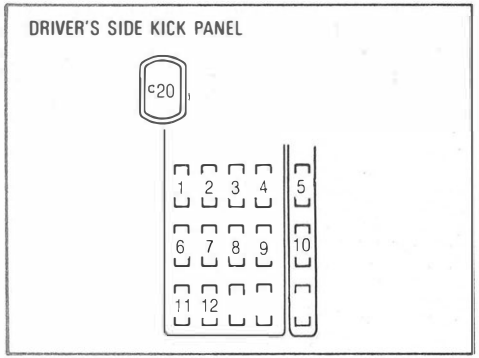
a. No specified load equalisation device or towing coupling is used.

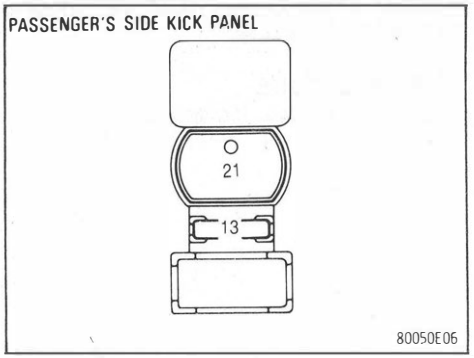
b. That the tow ball veartical load when added to the loaded weight of the towing vehicle is not greater than the specified G.V.W. of the vehicle.

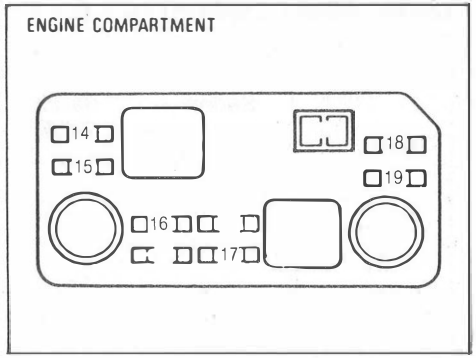
**TYRE PRESSURE**

Refer tyre plaque located on rear end of driver's door.

## Fuses and circuit breakers




**Fuse No**

1. **STOP 15 A:** Stop lights
2. **ENGINE 7.5A:** Charging system
3. **IGN 10 A:** Charging system, discharge warning light, emission control system, electric underhood cooling fans.
4. **GAUGE 7.5 A:** Gauges and meters, warning lights and buzzers (except discharge and open door warning lights) back-up lights, environmental control system, power door lock system
5. **30 A:** Rear window defogger, rear window defogger indicator light
6. **RADIO 7.5A:** Radio, cassette tape player, power rear view mirrors
7. **WIPER 20 A:** Windshield wipers and washer, rear window wiper and washer
8. **TAIL 15 A:** Tail lights, parking lights, side marker lights, licence plate lights, instrument panel lights
9. **TURN 10 A:** Turn signal lights
10. **ECU-1G**
11. **ECU-B**
12. **CIG 15 A:** Cigarette lighter, digital clock display
13. **10 A:** Air conditioner
14. **CHARGE 7.5 A:** Charging system, discharge warning light, automatic choke
15. **FAN-I/UP 7.5A**
16. **DOME 10 A:** Interior light, personal light, luggage compartment light, trunk room light, clock, open door warning light
17. **HAZ-HORN 15 A:** Emergency flashers, horns
18. **HEAD (LH) 10 A:** Left-hand head-light
19. **HEAD (RH) 10 A:** Right-hand head-light

**Circuit breaker No**

20. **DOOR LOCK 30 A**
21. **HEATER BLOWER MOTOR 30 A**

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## GENERAL MOTORS - HOLDENS AUTOMOTIVE LTD. NEW VEHICLE WARRANTY

GENERAL MOTORS - HOLDEN'S AUTOMOTIVE LTD. , HEREINAFTER HOLDEN'S, WARRANTS THAT IT WILL MAKE GOOD WITHOUT CHARGE, ANY DEFECT WHICH APPEARS IN THE VEHICLE IDENTIFIED IN THE IDENTIFICATION CERTIFICATE FOUND ON THE INSIDE OF THE FRONT COVER.

*Provided*

1. the defect has been notified to an authorised Holden Dealer or Service Dealer:
   (a) before the vehicle has travelled a distance of 20,000 km or,
   (b) within 12 months of the date of delivery of the vehicle to the first retail purchaser (or in the case of a demonstrator vehicle within 12 months of the date when is was first placed into service by the Dealer)

   whichever comes first, and
2. the vehicle has been returned to an authorised Holden Dealer or Service Dealer

   *and*
3. the Dealer has determined that the defect complained of is one of workmanship and *is not* caused by
   (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or by neglect
   (b) operation of the vehicle after it is known to be defective
   (c) accident or deliberate act
   (d) atmospheric fallout or flood, hail, salt, etc.
   (e) failure to carry out proper maintenance service
   (f) use of incorrect types and grades of fuel, oil or lubricants
   (g) alteration or modification of the vehicle by any party not authorised by Holden's
   (h) the fitting of parts or accessories not marketed by Holden's
   (i) any work carried out on the vehicle by someone other than an authorised Holden Dealer or Service Dealer,

BY THE DEALER (or as otherwise decided by Holden's) MAKING GOOD THE DEFECT BY REPAIR OR, AT THE OPTION OF HOLDEN'S, BY REPLACEMENT.

*Excluded from this Warranty are*

\# defects in tyres (these being warranted by their manufactures), and services such as engine tuning, brake adjustment, replacement of air and oil filter, wiper rubbers, etc. which are required as part of normal vehicle maintenance.

This Warranty applies only to vehicles operated in Australia and is given to the person who is entitled to possession of the vehicle whether as owner, lessee or otherwise and is given in addition to all right conferred by law on that person.

## Special notice to owners

### Availability of service and parts after warranty

Holden's has franchised dealers in many parts of Australia for the sale of service parts and the provision of service to owners of Holden's products. Every endeavour is made to ensure that such dealers carry adequate stocks of service parts and are equipped to provide satisfactory service, but Holden's does not make any promise that after the expiration of the warranty such parts or service facilities will be available, or available at any specific location or at any particular time.

### Unauthorised statements in relation to Holden's Products

No Holden Dealer or other person is authorised or permitted to give or make any statement assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden's product or in connection with the supply of any Holden's product, which is at variance with any written statement assertion or undertaking on any of these subjects given or made by Holden's in its published sales literature, and the Company does not accept any such unauthorised action.

### Warranty on Holden's replacement parts

Holden's warrants in respect of Holden's parts and accessories required as replacement parts, that it will make good by repair or at its option by replacement any defect occurring in any such Holden's parts and accessories within 12 months from the date of acquisition or in the case of a Holden's part or accessory which has been installed in a vehicle by a Holden Dealer or Service Dealer before such vehicle has travelled a distance of 20,000 kms from the date of installation, whichever first occurs.

## Warranty questions and answers

This section is designed to assist you in understanding the terms of the Holden's Warranty provided with your new car.

The following are some of the most frequently asked questions for which detailed answers have been provided.

*Question*
***How do I go about obtaining Holden's Warranty Service?***

**Answer**
It is the responsibility of the Selling Dealer to provide Holden's Warranty Service, therefore you should take your car to that Dealer whenever Holden's Warranty Service is required. However, if this is not possible, you may go to any other Authorised Holden Dealer. The details recorded inside the front cover of this handbook are required by the Dealer whenever you request Holden's Warranty Service.

Note that the 1,000 kilometre Warranty Service may be carried out by any Holden Dealer, provided you have a letter of introduction from the Selling Dealer. This letter must be arranged prior to obtaining the 1,000 kilometre service.

*Question*
***What should I do if, in an emergency, Holden's Warranty Service is required and an Authorised Holden Dealer is not available to provide such service at the time?***

**Answer**
If, in an emergency, a repair, replacement or adjustment (covered by the Holden's New Vehicle Warranty) is required to enable your car to be operated safely and it is not practical for you to have that service performed by an Authorised Holden Dealer, the service (to the extent that it is necessary to enable your car to be operated safely) may be performed by any other qualified service technician or repairer. A claim for the reasonable cost may be made through the Authorised Holden Dealer who would normally provide you with Holden's Warranty Service. You must also take your car to the Authorised Holden Dealer for inspection of the service and/or completion of any required Holden's Warranty Service as soon as possible.

*Question:*
***Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden's New Vehicle Warranty?***

**Answer:**
No, these items are not covered. The Holden's New Vehicle warranty only covers the repair, replacement or adjustment of those parts of your car which are found to be defective in materials or workmanship, No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your car will be recognised under the Holden's New Vehicle Warranty. The rights and remedies which are available to you under any relevant Statutory Enactment or otherwise, at law, in connection with any such claim for compensation, you must pursue outside the ambit of the Holden's New Vehicle Warranty.

## Warranty questions and answers - continued

*Question*
***What should I do if my car becomes unsafe or inoperative as a result of a defect which is covered by the Holden's New Vehicle Warranty?***

**Answer**
You should contact the nearest Authorised Holden Dealer as soon as possible and arrange for that Dealer to carry out the required Holden's Warranty Service.

*Question:*
***Will I have to pay for maintenance costs during the Warranty Period?***

**Answer**
Maintenance costs are not covered by the Holden's New Vehicle Warranty. However, the scheduled 1,000 kilometre service specified in chapter 9 of the handbook is free of charge (except for any lubricants used), provided that your car has been operated under normal operating conditions (refer page 9-2) and provided also that no modifications (other than a modification made by or at the direction of Holden's) has been made to your car. The Maintenance Schedules in this handbook specify the minimum maintenance required for your car operating under normal conditions.

The Maintenance items, except where they are required as a result of defects in materials or workmanship, for which you will be required to pay include:-

* Engine tune-up; including replacing spark plugs.
* Replacement of all filters.
* Cleaning or flushing of fuel, coolant, brake, engine, transaxle, etc., after the 1,000 kilometre service.
* Adding to or replacing lubricants.
* Adding to or replacing air conditioning refrigerant, after 5,000 km.
* Any necessary adjustments to drive belts, transaxles, clutch, park brake etc.
* Wheel balancing - after 5,000 kilometres.
* Wheel alignment
* De-dusting or de-glazing of brake linings or pads - after the 1,000 kilometre service.
* Brake lining wear or damage
* Brake disc pad or disc wear
* Battery re-charging
* Paint, bright metal finish and trim, due to normal deterioration.
* Body panel adjustment - after the 1,000 kilometre service.
* Door, or bonnet lock adjustments.
* Glass or channel adjustments - after the 1,000 kilometre service.
* Body rattle, squeaks and general tightening of bolts, fastenings and fittings - after the 1,000 kilometre service.
* Chipped glass or breakage.
* Torn or damaged floor mats or carpets.

## Warranty questions and answers- continued

*Question*
***Are my tyres covered by the Holden's New Vehicle Warranty?***

**Answer**
No. The tyres fitted to your car are covered by a separate warranty provided by the tyre manufacturer. An Authorised Holden Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

*Question*
***Are Holden's parts and accessories covered by warranties?***

If you purchase a Holden's part or accessory from an Authorised Holden Dealer it will by warranted by that Dealer under the Holden's parts and accessories Warranty against defects in materials or workmanship for a period of 12 months from the date at which you purchased it. In the case of a Holden's part or accessory which has been installed in a car by a Holden Dealer or a Service Dealer it will be warranted for a period of 12 months or a distance of 20,000 kms from the date of installation, whichever occurs first.

Maintenance items such as filters, spark plugs, wiper blades and brake pads/linings will require replacement as part of normal maintenance. Such replacements are not the subject of this warranty.

*Question*
***Would my car's engine benefit from fuel additives, oil additives or coolant additives not marketed by Holden's?***

**Answer**
The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives are *not* recommended; their use will not only increase operating costs, but may be detrimental to the operation of your car.

*Question*
***Will I have to pay for any costs or expenses in connection with the provision of Holden's Warranty Service?***

***All parts and labour used in carrying out Holden's Warranty Service at the premises of the Servicing Dealer are free of charge. Whenever Holden's Warranty Service is to be carried out by the Servicing Dealer it is your responsibility to deliver your car to the Servicing Dealer's premises.***

**Answer**
If, as a result of a defect which is covered by the Holden's New Vehicle Warranty, your car cannot be driven safely and you arrange for the nearest Authorised Holden Dealer to carry out the required Holden's Warranty Service, Holden's will accept reasonable towing costs to move your car to the nearest Holden Dealer's premises. Before employing a towing company, contact the nearest Holden Dealer and/or Holden's Customer Assistance to obtain guidance.

## Authorised Holden Dealers

ARNCLIFFE **Suttons Motors (Arncliffe) Pty Ltd** - 93 Princes Highway
ASHFIELD **Muirs Motors (Ashfield) Pty Ltd** - 252 Parramatta Road
BALGOWLAH **Mitchell Cox Holden** - 164 Condamine Street
BAULKHAM HILLS **Tony Packard Holden** - Cnr Victoria Ave & Windsor Rd
BLACKTOWN **West City Holden** - 120~128 Sunnyholt Road
CABRAMATTA **Autovillage Holden** - 266 Hume Highway
CAMPBELLTOWN **Paul Wakeling Holden** - Cnr Blaxland & Campbelltown Rds
CHULLORA **Suttons Motors (Chullora) Pty Ltd** - Cnr Hume Hwy & Waterloo Road
CROWS NEST **J.N. Caldwell (Holdings) Pty Ltd** - 1 Alexander Street
DEE WHY **Peninsula Holden** - Cnr May & Mooramba Roads
GORDON **Sundell Holden** - Cnr 836 Pacific Hwy & McIntyre Street
HOMEBUSH **Suttons Motors (Homebush) Pty Ltd** - 112 Parramatta Road
HOMEBUSH **Gilbert & Roach Pty Ltd** - 167~173 Parramatta Road
KINGSFORD **John Pellegrini Holden** - 263~271 Anzac Parade
LAKEMBA **Michael Lyons Holden** - 817 Canterbury Road
LIVERPOOL **A.C. McGrath & Co Pty Ltd** - Cnr Castlereagh St & Hume Hwy
MIRANDA **Greg Ball Holden** - 1~3 Kiora Road
NEWPORT **Mobil-Newport** - Cnr Barrenjoey Rd & Seaview Ave
PADSTOW **Purnell Bros Holden** - 19 Davies Road
PARRAMATTA **Boyded Parramatta** - 65 Church Street
PENNANT HILLS **Les Vagg Holden** - 351~355 Pennant Hills Road
PENRITH **Lance Motors (Penrith) Pty Ltd** - 39~47 Henry Street
ROCKDALE **Peter Terry Holden** - 571 Princes Hwy
RYDE **Hunter Holden** - 603~605 Victoria Road
ST. MARY'S **Lance Motors Pty Ltd** - Cnr Glossop & Harris Streets
WAITARA **Suttons Motors Waitara Pty Ltd** - 90 Pacific Hwy
WINDSOR Erichsen Motors - 18 Macquarie Street

***N.S.W.***
***Sydney area***

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ALBURY **Preston Motors Albury** - 647~657 Dean Street
ARDLETHAN **Carr's Engineering** - 4 Mirrool Street
ARMIDALE **New State Motors** - 103 Rusden Street
BALLINA **Quayside Motors** - Pacific Highway
BARADINE **John Farrell & Co** - Wellington Street
BARHAM **Hall's Motors Pty Ltd** - 44 Noorong Street
BATHURST **Bathurst Motors Pty Ltd** - 54 Durham Street
BATLOW **Robert Broadhurst Holden** - Pioneer Street
BEGA **Norm Honey Motors** - 247 Carp Street
BELLINGEN **E.H.H. Raymond Pty Ltd** - Broadway
BELMONT **Challenge Holden** - 444 Pacific Highway

***N.S.W***
***Country***

BLAYNEY **Mitchell Holden** - 98 Adelaide Street
BOMBALA **Delcott Engineering Pty Ltd** -Maybe Street
BOURKE **Bowden & Co (Bourke) Pty Ltd** - Richard Street
BOWRAL **Emile Wheeler Holden** - 380 Bong Bong Street
BREWARRINA **Hertslet Holden** - Bathurst Street
BROKEN HILL **Donlee Motors Pty Ltd** - Cnr Galena & Rakow Streets
CANOWINDRA **Canowindra Motors** - Gaskill Street
CARDIFF **Brian Kelly Holden** 35~39 MacQuarie Road
CASINO **McKinnon Holden** - 142 Barker Street
CESSNOCK **Geoff Boyd Holden** - 173~175 Wollombi Road
COBAR **Cobar Motors Pty Ltd** - Barton Street
COFF'S HARBOUR **Geoff King Holden** Cnr Pacific Hwy & Thompson Rd
COLLARENEBRI **Bruce's Garage & Service Station** - Wilson Street
COOLAMON **Coolamon Motors** - Cowabbie Street
COOMA **Summit Holden** - 66~70 Sharp Street
COONABARABRAN **Alan McWhirter Holden** - John Street
COONAMBLE **Moody's Motors** - Aberford Street
COOTAMUNDRA **Jenkins Garage** - 111 Wallendoon Street
COROWA **R.W.E. Fraser & Co** - 218 Honour Avenue
COWRA **Waugoola Motors Pty Ltd** - Kendal Street
CROOKWELL **Crookwell Autos** -114 Goulburn Street
DENILIQUIN **Burchfield Bros & Co** -112~114 End Street
DORRIGO **Phil Noble Motors** - 46~48 Hickory Street
DUBBO **Graeme Coxon Holden** - Cnr Darling & Bultje Streets
EDEN **Ron Doyle** -113 Imlay Street
FINLEY **Riverina Garage Finley** -104 Murray Street
FORBES **Paddison & Co** - Cnr Rankin St & Court Lane
GILGANDRA **Whitemans Holden** -106 Warren Road
GLEN INNES **Kingdom & Graham Motors** - 167 Grey Street
GLOUCESTER **Grahame's Garage Pty Ltd** -1 Park Street
GOSFORD **Noble Holden** - Pacific Highway
GOULBURN **Geissler Motors** - 279~298 Auburn Street
GRAFTON SOUTH **Nev Devir Holden** - 71~ 75 Spring Street
GRENFELL **Terry Carroll Motors Pty Ltd** - 40 Alexandra Street
GRIFFITH **Leo Franco Holden** -152 Yambil Street
GULARGAMBONE **Gulargambone Motors** - Bourbah Street
GUNDAGAI **McPherson Motors Pty Ltd** - Sheridan Street
GUNNEDAH **Namoi Valley Motors** - 48 Barber Street
GUNNING **Bailey's Garage Pty Ltd** - Yass Street

GUYRA **Burgess Garage Pty Ltd** - 131~143 Bradley Street
HARDEN **Ginty & O'Leary** - Cnr Station & Albury Streets
HAY **Royce Curtis Motors** - 168 Lachlan Street
HOLBROOK **Lieschke Motors Pty Ltd** - Albury Street
INVERELL **Gaukroger Sales Pty Ltd** - Vivian Street
JERILDERIE **Jerilderie Motors** - Jerilderie Street
JUNEE **Junee Motors** - Seignior Street
KANDOS **Chrisfield Holden** - 11 Angus Street
KATOOMBA **Arthur Brown Holden** - 136 Great Western Hwy
KEMPSEY **Thoroughgood Motors** - 118~132 Belgrave Street
KIAMA **Glen Fulton Holden** - 35~41 Collins Street
KURRI KURRI **Fren's Holden** - 281 Lang Street
KYOGLE **O & A Holden** - 128~134 Summerland Way
LEETON **John Ryan Holden** - 47 Pine Street
LISMORE **John Chant Motors Pty Ltd** - 21~27 Carrington Street
LITHGOW **Lithgow Motors** - 255 Main Street
MACKSVILLE **Eastland Auto Centre** - 18~22 Cooper Street
MACLEAN **O'Halloran Motors** - 175 River Street
MAITLAND **R.H. Taylor Holden** - 557~567 High Street
MOREE **Keith Haddad Holden** - Cnr Boston & Heber Streets
MORUYA **Surfair Holden** - 88 Vulcan Street
MUDGEE **Blue Ribbon Holden** - 10 Sydney Road
MULLUMBIMBY **Tony Carsburg Holden** - 2 Argyle Street
MURWILLUMBAH **Turner Holden** - 29 Prospero Street
MUSWELLBROOK **Upper Hunter Motors Pty Ltd** - 116 Bridge Street
NARRABRI **Allan Cooper Holden** - 181 Maitland Street
NARRANDERA **C. & S. Coelli** - 7 King Street
NARROMINE **L.E. Stanley Pty Ltd** - Dandaloo Street
NEWCASTLE **Young & Green Pty Ltd** - 745 Hunter Street
NOWRA **Glendon Motors Holden** - 301~313 Princes Highway
NYGAN **Nygan Motors** - 63 Pangee Street
ORANGE **Canobolas Holden** - 348 Summer Street
PARKES **Go Motors** - Cnr Mitchell & Clarinda Streets
PEAK HILL **S.Leary & Sons Pty Ltd** - Mingelo Street
PORT MACQUARIE **Todd Holden** - 16~20 Clarence Street
QUIRINDI **Browning Motors** - 82 Henry Street
SCONE **Upper Hunter Motors (Scone)** - 91 Kelly Street
SINGLETON **Lancaster Holden** - 80 John Street
SPRINGWOOD **Kerry's Motors Pty Ltd** - 28 Great Western Highway
TAMWORTH **Kensells Holden** - Cnr Bourke St & Kable Ave
TAREE **Hardes Auto House** - 61 Manning Street

***N.S.W.***
***Country area***
***continued***

TEMORA **Rod Lovering Holden** - 2 Stockinbingal Road
TENTERFIELD **Sexton & Green (Sales & Service) Pty Ltd** -148 Rouse Street
TORONTO **Young & Green (Toronto) Pty Ltd** - Carey Street
TUMBARUMBA **Broadhurst Autos** - Albury Street
TUMUT **Tumut Auto Sales & Service Pty Ltd** - Fitzroy Street
ULLADULLA **Auto Diesel Co Pty Ltd** - 150 Princes Highway
TWEED HEADS **Tweed Motors Pty Ltd** - 75~79 Tweed Street
WAGGA **Wagga Motors Pty Ltd** - 32 Dobney Avenue
WALCHA **Bowden's Garage Pty Ltd** - Derby Street
WALGETT **Walgett Garage Pty Ltd** - Wee Waa Street
WALLA WALLA **D.E. Lieschke & Son Pty Ltd** - Commercial Street
WARIALDA **Roger Moore** - Hope Street
WARILLA **Wilson's Warilla Pty Ltd** - 29 Shellharbour Road
WARREN **Fuller Bros** - Dubbo Street
WELLINGTON **Gersbach's Garage Pty Ltd** - 92 Lee Street
WEST WYALONG **West Wyalong Motors** - 183 Main Street
WOLLONGONG **Dwyers Pty Ltd** - 31~33 Crown Street
WOODENBONG **Frawley Bros Holden** - Unumgar Street
WYONG **W.M. Holden** - Pacific Highway
YASS **Bill Nesbitt Holden** - 221 Comur Street
YOUNG **Harden & Geelan Holden** - 48 Boorowa Street

***N.S.W. Country area continued***

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BELCONNEN **Gerald Slaven Holden** - Josephson Street
BRADDON **Beazley & Bruce** - 44 Mort Street
PHILLIP **Commonwealth Motors Pty Ltd** - 158 Melrose Drive

***A.C.T.***

ABBOTSFORD **East City Holden** - 601 Victoria Street
BERWICK **Barry Bourke Holden** - 755 Princes Highway
BUNDOORA **Watson Holden** - 413 Grimshaw Street
BURWOOD **Penfold Holden** - 63 Burwood Road
CAULFIELD **Booran Holden** - 1049 Glenhuntly Road
CHELSEA **Harrison Holden** - 370 Nepean Highway
CHELTENHAM **Balmoral Holden** - 1212 Nepean Highway
DANDENONG **Graeme Blanchard Holden** - Princes Highway
ELSTERNWICK **Reg Hunt Holden** - 77 Nepean Highway
ESSENDON **Preston Motors (Essendon) Pty Ltd** - 205~211 Keilor Road
FAWKNER **Mantello Holden** - 1263 Sydney Road
FERNTREE GULLY **Neilson Holden F.T.G.** - 980 Burwood Highway
FOOTSCRAY **Alan Mance Holden** - 435 Barkly Street
FRANKSTON **Noel Gould Holden** - 140 Dandenong Road
GEELONG **R & B Smith Holden** - 510 Moorabool Street
GEELONG **Winter & Taylor (Sales) Pty Ltd** - 23 Cavendish Street
GLEN WAVERLEY **Geoff Brady Holden** - 565~577 Springvale Road
HASTINGS **Westernport Holden** - 843 Frankston~Flinders Road
LILYDALE **Noel Dight Holden** - 344 Main Street
MORNINGTON **Peninsula Holden** - 976 Nepean Highway
OAKLEIGH **Garry & Warren Smith** - 1575 Dandenong Road
PRESTON **Arnold Holden** - 573~603 High Street
RINGWOOD **Patterson Cheney Holden** - 45~57 Maroondah Highway
SOUTH MELBOURNE **Patterson Cheney Holden** - 132 Sturt Street
SUNSHINE **Kevin Dennis Holden** - 272 Ballarat Road
WERRIBEE **Ballan Holden** - Princes Highway
WEST MELBOURNE **Reg Hunt Holden** - 577 King Street

***Victoria***
***Melbourne area***

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ARARAT **David Reid Motors** - High Street
BAIRNSDALE **The Big Garage** - 199 Main Street
BALLARAT **Peter Amor Motors** - 6~16 Mair Street East
BENALLA **Arnott's Motors** - 88~90 Bridge Street
BENDIGO **Ron Poyser Holden** - Cnr High & Myrtle Streets
BIRCHIP **R.L. & C.J. Bales** - 38 Cumming Avenue
BOORT **Jaron Motors** - 55 Godfrey Street
CAMPERDOWN **Alan Rogers Holden** - 114~116 Manifold Street
CASTERTON **Coxons Autos** - 139 Henty Street
CASTLEMAINE **Ron Poyser Castlemaine** - Barker Street
CHARLTON **K.V. Charlton** - 70 High Street

***Victoria***
***Country area***

COBRAM **Frank D'Alberto Holden** - 56~60 Punt Road
COHUNA **Humphrey Motors Pty Ltd** - 13~15 Market Street
COLAC **Parker Bros Motors Co** - 224 Murray Street
COLERAINE **Coleraine Auto Repairs** - Whyte Street
CORRYONG **Middleton Motors Pty Ltd** - Hanson Street
DAYLESFORD **K.R. Little Pty Ltd** - Vincent Street
DERRINALLUM **Urquhart Motors** - Main Street
DIMBOOLA **Westerfield Motors Pty Ltd** - 64 Lloyd Street
DONALD **O.A. Shilton & Sons Pty Ltd** - Wood Street
ECHUCA **Echuca Motors** - 148 Murray Valley Highway
EUROA **Croxford Holden** - 41 Clifton Street
FOSTER **Ray Dower Motors** - 78 Main Street
HAMILTON **Slorach Autos Pty Ltd** -261 Gray Street
HOPETOUN **Hopetoun Motors** - Lascelles Street
HORSHAM **Ranley Holden** - 22 O'Callaghans Parade
KANIVA **Kaniva Motors** - 82 Commercial Street
KERANG **Hall & Sons (Kerang) Pty Ltd** - 86 Wellington Street
KOOWEERUP **Gray Blakey Holden** - Station Street
KORUMBURRA **Graham Wallace Holden** - 42 Commercial Street
KYABRAM **D'Alberto Holden** - 60 McEwen Road
KYNETON **Mollison Motors Pty Ltd** - 167 Mollison Street
LEONGATHA **Gleeson Holden** - 37~43 Bair Street
MAFFRA **Knight Paterson Holden** - Johnson Street
MARYBOROUGH **Graham Jacka Holden** - 35 Nolan Street
MILDURA **Stuart & Harrison (Sales) Pty Ltd** - 24~32 Deakin Avenue
MINYIP **Munro Sales & Service** - 8 Market Street
MIRBOO NORTH **Ridgeway Motors** - 106 Ridgeway Road
MORTLAKE **W. Christian (Mortlake) Pty Ltd** - 107 Dunlop Street
MURRAYVILLE **Peers Motors** - McKenzie Street
NATHALIA **BHB Motors** - 6 Blake Street
NHILL **Ivan Morrow Motors Pty Ltd** - 71~73 Nelson Street
NULLAWIL **Nullawil Motors & General Engineers** - Calder Highway
ORBOST **Merlin Motors** - Stanley Street
PORTLAND **Reynolds Holden** - 15~17 Richmond Street
QUAMBATOOK **Quambatook Auto Services** - 32 Gutherie Street
ROCHESTER **Bruce Hocking Motors Pty Ltd** - 71 Moore Street
RUTHERGLEN **Jasper Bros Pty Ltd** - Main Street
SALE **Sturgess Smith Holden** - 232~240 York Street
SEA LAKE **Paddy Smith Holden** - Calder Highway

*Victoria*
*Country area*
*continued*

SEYMOUR **Neil Beer Holden** - 49 Emily Street
SHEPPARTON **Parker Bros Auto Co** - Melbourne Road
STAWELL **David Reid Holden** - 71~73 Main Street
ST. ARNAUD **Maurie McGrath Motors** - 126 Napier Street
SWAN HILL **Nyah Motors** - 59~61 Nyah Road
TALLANGATTA **Crispin Motors** - 21 Towong Street
TIMBOON **Timboon Motors** - Bailey Street
TRARALGON **Colin Watson Holden** - Princes Highway
UNDERBOOL **A.J. Gloster & Sons** - Cotter Street
WANGARATTA **Alan Capp (New Cars) Pty Ltd** - Tone Road
WARBURTON **Col McKenzie Holden** - Main Street
WARRACKNABEAL **Amor Motors Aubrey Truck Sales** - 33 Woolcock Street
WARRAGUL **John Carter Holden** - 47 Queen Street
WARRNAMBOOL **Callaghan Motors Pty Ltd** - 133~137 Fairy Street
WODONGA **McRae Holden** - Cnr Hume Highway & Melrose Avenue
WONTHAGGI **J.P. Holden** - 2 Murray Street
YARRAM **Graham Helleren Motors Pty Ltd** - Bland Street
YARRAWONGA **Pigdons Pty Ltd** - Belmore Street

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*Tasmania*

BURNIE **Motors Burnie** - 84~89 Marine Terrace
DEVONPORT **Motors Devonport** - Victoria Parade
HOBART **Motors Pty Ltd** - 179 MacQuarie Street
KING ISLAND **King Island Motors Pty Ltd** - Netherby Road, Currie
LAUNCESTON **Motors Launceston** - Elizabeth Street
SMITHTON **Motors Pty Ltd** - 116 Nelson Road
ULVERSTONE **Motors Pty Ltd** - 99 Reibey Street

ALBION **Bill Harrison Car Sales** - Frodsham Street & Crosby Road
ASPLEY **Zupps (Aspley)** -1442 Gympie Road
BEENLEIGH **Crest Holden** - 81~83 Logan River Road
BOOVAL **Zupps Holden** - 246 Brisbane Road
CLEVELAND **Brian Trebble Motors** - 6 Wellington Street
MOOROOKA **John Sivyer Holden** - 1060 Ipswich Road
MT. GRAVATT **Zupps Motors Pty Ltd** - 1310 Logan Road
NEWSTEAD **Eagers Retail Pty Ltd** - 95 Breakfast Creek Road
NUNDAH **Eagers (Northside)** - 1319 Sandgate Road
PETRIE **North Pine Motors** - Gympie Road
REDCLIFFE **Village Holden** - 425 Elizabeth Avenue
SPRINGWOOD **Motorama Holden** - Cnr Pacific Highway & Brennan Street
WINDSOR **Leach Holden** - 143 Newmarket Road
WOOLLOONGABBA **Armstrong Holden** - 73 Ipswich Road
WYNNUM **Doug Barton Holden** - 200 Tingal Road

***Queensland***
***Brisbane area***

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ATHERTON **Redding Motors Pty Ltd** - 2 Cook Street
AYR **Honeycombes Sales & Service** - 115~119 Railway Street
BEAUDESERT **Lee Holden** - 57 Brisbane Street
BLACKWATER **B.P. Tyre Power** - Capricorn Highway
BOWEN **John Thorley Holden** - 47 Leichardt Street
BUNDABERG **Ross Gray Holden** - Takalvan Street
CABOOLTURE **Beecham Holden** - Bribie Island Road
CAIRNS **Ireland Holden** - 227~233 Mulgrave Road
CALOUNDRA **Drinnan Holden** - Caloundra Road
CAPELLA **S.A. Rickett & Co** - Peak Downs Street
CHARLEVILLE **Alan Dobbin Holden** - 129 Alfred Street
CHARTERS TOWERS **Peters Holden** - 57 Mosman Street
CHINCHILLA **Ainsworth Motors & Machinery Pty Ltd** - 55 Chinchilla Street
CLONCURRY **Cloncurry Motors** - 59 Scarr Street
CROWS NEST **Dennis Nissen Motors** - 14 William Street
CUNNAMULLA **South West Autos** - 25 John Street
DALBY **Johnson's Holden** - 36 Drayton Street
EMERALD **Leahy Motors** - Clermont Street

***Queensland***
***Country area***

GATTON **Gatton Auto Centre** - 67 Railway Street
GLADSTONE **Andersons Auto City** - 56 Yaroon Street
GAYNDAH **Gayndah Motors** - Capper Street
GOONDIWINDI **Border Holden** - Cnr Albert & Russell Streets
GYMPIE **Madills** - 35 Mellor Street
INGHAM **Origlasso Motors** - 99 Lannercost Street
INNISFAIL **I.C. Taylor Pty Ltd** - 117 Edith Street
JULIA CREEK **Julia Creek Motors Pty Ltd** - Burke Street
KILCOY **Hobart's Garage** - 58 Mary Street
KINGAROY **John Dundas Pty Ltd** - 38 King Street
LAIDLEY **Buhse's Garage Pty Ltd** - 5 Spicer Street
LONGREACH **Longreach Motors** - 33 Swan Street
MACKAY **Pioneer Holden** - Cnr Gordon & Wellington Streets
MACKAY **James Crocker & Sons Pty Ltd** - 17 Wellington Street
MAREEBA **Borman Motors Pty Ltd** - 76 Byrne Street
MAROOCHYDORE SOUTH **Sunco Holden** - Wises Road
MARYBOROUGH **Whitaker Holden** - 109~111 March Street
MITCHELL **Eastern Sales & Service** - 155 Alice Street
MONTO **Mac's Parts & Service Pty Ltd** - Cnr Lister & Kelvin Streets
MOUNT. ISA **Barkly Motors Pty Ltd** - Marian Street
MOURA **Moura Steering & Brake Service** - Theodore Road
MURGON **Clifton Motors** - McAllister Street
NAMBOUR **Kallenbach Motors** - 139 Howard Street
NANANGO **Nanango Motors Pty Ltd** - 72~74 Drayton Street
NOOSA HEADS **Gilbert Motors Pty Ltd** - Cnr Cooroy Noosa Rd & Coral Tree
PROSERPINE **Crossley Car Whitsunday Pty Ltd** - 162~164 Main Street
QUILPIE **Quality Motors** - Boonkai Street
ROCKHAMPTON **Lawrence's** - 327 Richardson Road
ROMA **Maranoa Multi Agencies** - Bowen Street
SOUTHPORT **Lockhart Holden** - 70 Nerang Street
SPRINGSURE **Springsure Motors** - Eclipse Street
ST. GEORGE **Halpin Motors** - 39~41 Grey Street
STANTHORPE **Central Motors** - 42 Maryland Street
SURAT **Bayly Motors** - 81 Burrowes Street
TARA **Shaw Motors** - 10 Wilson Street
THEODORE **C.J. Auto Repairs** - 6th Avenue
TOOWOOMBA **Eagers Retail Pty Ltd** - Cnr James & Hume Streets
TOWNSVILLE **Tony Ireland Holden** - 87~91 Charters Towers Road

***Queensland***
***Country area***

TULLY **Central Service Station** - 12 Richardson Street
WARWICK **Deighton Motors Pty Ltd** - Grafton Street
WINTON **Gillespie Motor Dealers Pty Ltd** - Elderslie Street
YULEBA **Cox Motors** - Stephenson Street

***Queensland Country area continued***

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ALICE SPRINGS **Kittle Bros (Alice Springs) Pty Ltd** - Cnr Wills & Railway Terrace
DARWIN **Kerry Holden** - 21~25 Stuart Highway
KATHERINE **Master Motors** - 1130 Victoria Highway

***N.T.***

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CANNINGTON **Brian Gardner Holden** - 1308 Albany Hwy
FREMANTLE **Shacks Holden** - 64 Queen Victoria Street
GOSNELLS **Lance Gibbons Holden** - 2325 Albany Highway
MELVILLE **Melville Motors Pty Ltd** - 532~536 Canning Highway
MIDLAND **Goldy Holden** - 161 Great Eastern Highway
MORLEY **Metro Motors Pty Ltd** - 212 Walter Road
NAVAL BASE **Shacks Cockburn** - 15 Rockingham Road
OSBORNE PARK **North City Holden** - Cnr Scarborough Beach Rd & Harborne St
PERTH **City Motors** - 505 Newcastle Street
VICTORIA PARK **Young's Holden** - 529 Albany Highway
WANNEROO **Phoenix Holden** - 5 Berriman Drive

***W.A. Perth area***

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ALBANY **Manley Stanwell Holden** - 92~98 Earl Street
AUGUSTA **Augusta Garage & Service Station** - 100 Blackwood Ave
BEVERLEY **Barnsley Holden** - 149 Vincent Street
BOYUP BROOK **Strapp Motors** - 7 Bridge Street
BRIDGETOWN **Kordics Bridgetown** - Hampton Street
BROOKTON **Coote Motors** - Robinson Road
BOOME **Norwest Holden** - McPherson Street
BRUCE ROCK **McCall Motors** - Butcher Street
BUNBURY **Wallace Holden** - 72 Spencer Street
BUSSELTON **Fennessy Holden** - 2~4 Bussell Hwy
CARNAMAH **T & H Walton Stores Pty Ltd** - Robertson Street
CARNARVON **North West Autos** - 175 Robinson Street

***W.A. Country area***

COLLIE **Station Motors** - 102 Throssell Street
CRANBROOK **Cranbrook Motors** - 11~13 Gathorne Street
DALWALLINU **Reid & Inglis** - Johnson Street
DERBY **Derby Auto Repairs** - 27 Loch Street
ESPERANCE **Dempster Holden** - Norseman Road
GERALDTON **Youngs Motors** - Cathedral Avenue
GNOWANGERUP **G.S. Hendry & Co Pty Ltd** - Yougenup Street
KALGOORLIE **Kyle Motors** - 114 Boulder Road
KATANNING **Edwards Holden** - 159 Clive Street
KELLERBERRIN **Dowding Motors** - 1 Mitchell Street
KOJONUP **F.W. & M. Harris & Sons** - 98 Albany Highway
KUNUNURRA **Elgee Automotive & Diesel Services** - Mango Street
MANJIMUP **Kordics** - Rose Street
MERREDIN **Carson's of Merredin** - 112 Barrack Street
MOORA **Frank Lewis Holden** - Gardiner Street
MORAWA **T & H Walton Stores - Morawa** - 6 Buron Road
MT. BARKER **Lori's Auto's** - 63 Lowood Road
NAREMBEEN **W.J. Nichols (1979) Pty Ltd** - 20 Churchill Street
NARROGIN **Narrogin Motors** - Cnr Ensign & Federal Streets
NORTHAM **Withnell Motors** - 58 Fitzgerald Street
PORT HEDLAND **Paul Moxham Holden** - 26~28 Anderson Street
WAGIN **Marley White & Co** - Tudor Street
WILLIAMS **R.S. Logie & Sons** - Rosselloty Street
WONGAN HILLS **Agro Machinery Pty Ltd** - Fenton Street
WYALKATCHEM **J.S. Rimmer & Sons** - Railway Terrace

***W.A.***
***Country area***
***continued***

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ADELAIDE **City Holden** - 203~221 Grenfell Street
ELIZABETH **Peter Page Holden** - Elizabeth Way
MALVERN **Claridge Holden** - 361~367 Unley Road
PORT ADELAIDE **Smiths of Port Adelaide** - 171 Commercial Road
REYNELLA **Southgate Holden** - 49~59 Main South Road
SOMERTON PARK **John H. Ellers** - 282 Brighton Road
THEBARTON **United Holden** - 1 Port Road
VALLEY VIEW **Plaza Holden** - 817~839 North East Road

***S.A.***
***Adelaide area***

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BALAKLAVA **Balaklava Motors** - 4 Wallace Street
BERRI **Rosenthal Bros Pty Ltd** - Vaughan Terrace
CEDUNA **Beck Motors Pty Ltd** - Poynton Street
CLARE **Brian Holmes Holden** - 7 Old North Road
CLEVE **Herbert Motors Pty Ltd** - Main Street
CRYSTAL BROOK **Newitt's** - 26 Brandis Street

***S.A.***
***Country area***

CUMMINS **Trigg & Wedd** - 3 Umlauf Street
GAWLER **Steinhage Holden** - Cnr Murray & Bridge Sts
JAMESTOWN **Jamestown Motors Pty Ltd** - 23 Spalding Road
KADINA **J.H. Rosewarne Pty Ltd** - Graves Street
KEITH **Farmers Centre** - McBain Street
KINGSCOTE **Roberts Motors** - Telegraph Street
KINGSTON **Lecornu's Service Garage** - Agnes Street
LAMEROO **Des Pahl Motors** - 27 Chandos Terrace
LOXTON **Flight Motors Pty Ltd** - Bookpurnong Terrace
MAITLAND **Maitland Motors Pty Ltd** - 58 Robert Street
MALLALA **Curnow's Garage Pty Ltd** - Balaklava Road
MENINGIE **Peter Hood Holden** - Cnr Princes Highway & Coonalpyn Road
MILLICENT **Aslin Motors** - 98 George Street
MT. BARKER **Gilbert Motors (Mt. Barker) Pty Ltd** - 57 Adelaide Road
MT. GAMBIER **O.G. Roberts & Co** - Jubilee Highway West
MURRAY BRIDGE **Dutton Motors Pty Ltd** - 7 Adelaide Road
NARACOORTE **Kingcraig Motors Pty Ltd** - 158~164 Smith Street
PORT AUGUSTA **Williams Holden** - 38 Stirling Road
PORT LINCOLN **City Motors** - King Street
PORT PIRIE **Spencer Holden** - 50 Ellen Street
RENMARK **Rosenthal Motors Pty Ltd** - Ral Ral Avenue
STRATHALBYN **Gilbert Motors (Strathalbyn) Pty Ltd** - High Street
TANUNDA **E.H. Hage & Co Pty Ltd** - 50 Murray Street
TUMBY BAY **Seaview Motors** - Tumby Terrace
VICTOR HARBOR **Southern Holden** - 5 Victoria Street
WAIKERIE **Riverside Holden** - 6 Crush Terrace
WHYALLA **Mitchell Holden** - 64 Essington Lewis Avenue
YANKALILLA **Martin Motors Pty Ltd** - Main Street
YORKETOWN **Southway Holden** - 7 Minalaton Road

***S.A.***
***Country area***
***continued***

## Customer assistance

We want you to be happy with your new car together with the people you deal with while you have the car.

Normally, any problems which may arise with the sales transaction, operation or servicing of your car will be handled by your Dealer's Sales and Service Department.

We realise however, that, with the best intentions, misunderstandings do occur sometimes.

Accordingly, we suggest you discuss any concern with one of the Dealer's management people. If you haven't received satisfaction from the Sales Manager or Service Manager—go to the General Manager or to the Dealer himself.

By now you should have satisfaction. If not, you have the facility of the Holden's Customer Assistance Service office at your disposal. The Holden's Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is 646 5466. Outside the Melbourne Metropolitan area, the number is 008 03 3349.

If your concern relates to parts/accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden's Service Parts Operations on (03) 797 7341.

Naturally, telephoning is the quickest and the best way of contact. However, if you prefer to write the address is:

The Manager
Holden's Customer Assistance Services
GPO Box 548D
Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

* Your name and address
* Telephone numbers, both Private and Business
* Servicing Dealership name and address
* Vehicle model
* Vehicle Identification Number (V.I.N.)
* Date of purchase
* Current odometer reading

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of this handbook.

## Vehicle Maintenance Schedule

**An odometer reading or time interval determines when service is necessary.**

For most people, the odometer reading will indicate when service is needed. If, however, you drive very little, your vehicle should be serviced at least every 6 months, as shown on the schedule. ***Under severe driving conditions,*** maintenance is required more frequently than listed in the table.

The following could be considered to be severe driving conditions:

- Extensive idling such as taxis, police cars or door to door delivery vehicles.
- Repeated short trips (less than 8 km).
- Driving on rough and/or muddy roads.
- Driving on dusty roads.
- Camper or trailer towing.
- Driving in extremely cold weather and/or on salted roads.
- Repeated short trips in extremely cold weather.

The periodic maintenance service should be followed to ensure correct emission control at all times.

If any of the components or systems are out of adjustment, toxic elements (CO, HC and NOx) in excess of prescribed levels may be emitted into the atmosphere.

Maintainence operation (description of lettering given in box below "SERVICE PERIODS"):
R = Replace or change
A = Check/adjust as necessary
I = Inspect, adjust or report as necessary
T = Tighten to specified torque

| Ringed lettering shows preferred additional service periods for certain items when vehicle is subjected to severe or abnormal conditions. | SERVICE PERIODS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1000 km | 5000 km or 3mths | 10000 km or 6mths | 20000 km or 12mths | 30000 km or 18mths | 40000 km or 24mths | 50000 km or 30mths | 60000 km or 36mths | 70000 km or 42mths | 80000 km or 48mths |
| **BASIC ENGINE COMPONENTS** | | | | | | | | | | |
| 1. Timing belts#1 | SEE NOTE BELOW | | | | | | | | | |
| 2. Valve clearance | • | • | • | • | • | • | • | • | • | A |
| 3. Drivebelts | • | • | • | I | • | I | • | I | • | I |
| 4. Engine oil (grade SF, SG or better)#2 | • | Ⓡ | R | R | R | R | R | R | R | R |
| 5. Engine oil filter#2 | • | Ⓡ | R | R | R | R | R | R | R | R |
| 6. Cooling and heater system hoses and connections | • | • | • | • | • | I | • | • | • | I#3 |

#1 Timing belt replacement is recommended at every 100,000 km if vehicle idles for extensive periods and/or is driven long distances at low speeds—taxis, police cars or door to door delivery vehicles are typical examples.
#2 Change every 5000 km or 3 months under severe driving conditions.
#3 After 80000 km or 48 months, inspect every 20000 km or 12 months, whichever comes first.

Maintainence operation (description of lettering given in box below "SERVICE PERIODS"):
R = Replace or change
A = Check/adjust as necessary
I = Inspect, adjust or report as necessary
T = Tighten to specified torque

| Ringed lettering shows preferred additional service periods for certain items when vehicle is subjected to severe or abnormal conditions. | SERVICE PERIODS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1000 km | 5000 km or 3mths | 10000 km or 6mths | 20000 km or 12mths | 30000 km or 18mths | 40000 km or 24mths | 50000 km or 30mths | 60000 km or 36mths | 70000 km or 42mths | 80000 km or 48mths |
| 7. Engine/radiator coolant#4 (see "Cooling system inhibitor selection" page 24) | • | • | • | R#5 | • | R#5 | • | R#5 | • | R#5 |
| 8. Oil cooler hoses (4AF engine with 4 speed automatic transaxle) | • | • | • | • | • | I | • | • | • | I#6 |
| 9. Exhaust pipes and mountings | • | • | Ⓘ | I | Ⓘ | I | Ⓘ | I | Ⓘ | I |
| **AIR CONDITIONER (A/C)** | | | | | | | | | | |
| 1. Inspect refrigerant level sight glass | I | • | I | I | I | I | I | I | I | I |
| 2. Inspect pipes and tubes including alignment | I | • | I | I | I | I | I | I | I | I |
| 3. Inspect drain tube | I | • | I | I | I | I | I | I | I | I |
| 4. Inspect idle cut-off and/or idle-up | I | • | I | I | I | I | I | I | I | I |
| 5. Inspect condenser, clean if necessary | • | • | I | I | I | I | I | I | I | I |
| **IGNITION SYSTEM** | | | | | | | | | | |
| 1. Battery | • | • | I | I | I | I | I | I | I | I |
| 2. Spark plugs | • | • | • | R | • | R | • | R | • | R |
| **FUEL SYSTEM** | | | | | | | | | | |
| 1. Fuel filter | • | • | • | • | • | • | • | • | • | R |
| 2. Air filter | • | Ⓘ#7 | Ⓘ#7 | I#7 | Ⓘ#7 | R#7 | Ⓘ#7 | I#7 | Ⓘ#7 | R#7 |

#4 Coolant does not contain anti-freeze.
#5 It is recommended that Coolant-Conditioner specification number HN 1791 be placed in radiator before pouring in fresh water—see "Cooling System Inhibitor Selection" page 24.
#6 After 80000 km or 48 months, inspect every 20000 km or 12 months whichever comes first.
#7 Inspect every 2500 km or every 6 weeks if subjected to severe or dusty conditions.

*Vehicle Maintenance Schedule continued overleaf*

Maintainence operation (description of lettering given in box below "SERVICE PERIODS"):
R = Replace or change
A = Check/adjust as necessary
I = Inspect, adjust or report as necessary
T = Tighten to specified torque

| Ringed lettering shows preferred additional service periods for certain items when vehicle is subjected to severe or abnormal conditions. | SERVICE PERIODS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1000 km | 5000 km or 3mths | 10000 km or 6mths | 20000 km or 12mths | 30000 km or 18mths | 40000 km or 24mths | 50000 km or 30mths | 60000 km or 36mths | 70000 km or 42mths | 80000 km or 48mths |
| 3. Choke system | • | • | • | • | • | I | • | • | • | I |
| 4. Idle speed | A | • | • | A | • | A | • | A | • | A |
| 5. Fast idle speed | A | • | • | A | • | A | • | A | • | A |
| 6. Fuel tank cap, fuel line and connections, and/or fuel vapour control valve#8 | | • | • | • | • | I | • | • | • | I#9 |
| **EMISSION CONTROL SYSTEM** | | | | | | | | | | |
| 1. Dash pot (DP) or throttle positioner (TP) system#8 | A | • | • | A | • | A | • | A | • | A |
| 2. Charcoal canister | • | • | • | • | • | R | • | • | • | R |
| **CHASSIS AND BODY** | | | | | | | | | | |
| 1. Clutch pedal | I | • | • | • | • | • | • | • | • | • |
| 2. Brake pedal and parking brake | I | • | • | I | • | I | • | I | • | I |
| 3. Brake linings and drums | • | • | Ⓘ | Ⓘ | Ⓘ | I | Ⓘ | Ⓘ | Ⓘ | I |
| 4. Brake pads and discs | • | • | Ⓘ | I | Ⓘ | I | Ⓘ | I | Ⓘ | I |
| 5. Brake fluid | I | • | I | I | I | R | I | I | I | R |
| 6. Clutch fluid | I | • | I | I | I | I | I | I | I | I |
| 7. Brake line pipes and hoses | I | • | Ⓘ | I | Ⓘ | I | Ⓘ | I | Ⓘ | I |
| 8. Power steering fluid | • | • | • | I | • | I | • | I | • | I |

#8 Refer Vacuum Hose Information Label under hood.
#9 After 80000 km or 48 months, inspect every 20000 km or 12 months whichever comes first.

Maintainence operation (description of lettering given in box below "SERVICE PERIODS"):
R = Replace or change
A = Check/adjust as necessary
I = Inspect, adjust or report as necessary
T = Tighten to specified torque

| Ringed lettering shows preferred additional service periods for certain items when vehicle is subjected to severe or abnormal conditions. | SERVICE PERIODS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1000 km | 5000 km or 3mths | 10000 km or 6mths | 20000 km or 12mths | 30000 km or 18mths | 40000 km or 24mths | 50000 km or 30mths | 60000 km or 36mths | 70000 km or 42mths | 80000 km or 48mths |
| 9. Steering wheel and linkage | • | • | Ⓘ | I | Ⓘ | I | Ⓘ | I | Ⓘ | I |
| 10. Drive shaft boots | • | • | Ⓘ | I | Ⓘ | I | Ⓘ | I | Ⓘ | I |
| 11. Ball joints and dust covers | • | • | Ⓘ | I | Ⓘ | I | Ⓘ | I | Ⓘ | I |
| 12. Differential gear oil (3 speed automatic transaxle only) | • | • | • | I | | R | • | I | • | R |
| 13. Automatic transaxle fluid | • | • | • | I | • | I | • | R | • | I |
| 14. Manual transaxle oil | • | • | • | I | • | I | Ⓡ | I | • | I#10 |
| 15. Front and rear suspensions | • | • | • | Ⓘ | • | I | • | Ⓘ | • | I |
| 16. Chassis and body bolts and nuts | T | • | Ⓣ | T | Ⓣ | T | Ⓣ | T | Ⓣ | T |
| 17. Tyres and inflation pressures | • | • | I | I | I | I | I | I | I | I |
| 18. All lights, horns, wipers and washers | • | • | I | I | I | I | I | I | I | I |
| **ROAD TEST** | | | | | | | | | | |
| 1. Road test vehicle | • | • | I | I | I | I | I | I | I | I |
| 2. Front wheel alignment (side slip)#11 | • | • | • | • | • | • | • | • | • | • |

#10 Replace every 100,000 km or 60 months whichever comes first.
#11 Inspect when abnormal condition is noted.

## Air conditioner information

For guidance on how to operate the air conditioner, see "How the air conditioner controls work" in part "A" of this Manual.

In the process of conditioning air, the air conditioner unit removes moisture. The moisture runs onto the surface beneath the vehicle, so do not become alarmed if a pool of water is noticed below a stationary vehicle when the air conditioner is operating.

The air conditioner items requiring service are given on each of the service vouchers in this book.

Like the rest of your vehicle, the air conditioner does require regular maintenance. As an added precaution, the unit should be turned off if a malfunction is noticed (i.e. if it is not working) and the vehicle taken to an authorised Holden Dealer at the earliest possible convenience.

To keep the air conditioner as free as possible from odours that may be given off from such things as tobacco smoke, it is best to use the FRESH mode as often as conditions allow. This gives odour giving elements less chance to condense on the evaporator fins of the cooling unit.

## Important service information

### Vehicle efficiency

Always have your Holden serviced regularly, for by doing this, you will ensure the continued efficiency of your vehicle.

It is recommended that you ask your Holden Dealer to carry out the service because they are equipped with special service tools, and have staff experienced in servicing Holden vehicles.

### Recommended daily and weekly checks

The checks given below are easily carried out and are strongly advised.

DAILY CHECKS:

1. Coolant (radiator water) level—see "Cooling system" in part "A" of this manual.
2. Engine oil level—see "Checking the oil" in part "A" of this manual.

WEEKLY CHECKS:

1. Tyre pressure including spare—see tyre placard on end of driver's door.
2. Brake and clutch master cylinder fluid levels—see "Checking brake and clutch fluid" in part "A" of this manual.
3. Windshield washer fluid level/s—see "Adding washer fluid" in part "A" of this manual.

### Vehicle Appearance

If you park or garage your vehicle where the atmosphere or road surface contains salt, you should wash your vehicle frequently to minimise corrosion. See "Corrosion prevention and appearance care" in part "A" of this manual.

### Lubricant selection

When your vehicle was being designed, great care was taken when selecting lubricants for the engine and transaxle. These lubricants are given in this manual; they have been extensively tested and give the required performance. It is not recommended that their chemical composition be changed by adding proprietary line additives.

### Cooling system inhibitor selection

The use of Holden radiator inhibitor specification number: HN 1791 is of primary importance when replacing the coolant in Holden vehicles. Radiator inhibitor must always be used in the vehicle cooling system. The chemical composition of the inhibitor is the product of many years of development. It prevents corrosion from taking place in the engine cooling system. Therefore, it must always be added when renewing the engine

coolant and ***never mixed*** with any other additive or anti-freeze.

In the event that an anti-freeze type inhibitor is required, use Holden's long life inhibitor meeting specification HN 1897. See page 50 in part 'A' of this handbook for further information.

**Holden's commitment to quality service**
Quality is uppermost throughout the design, testing and manufacture of Holden vehicles. Each one is made to exacting specifications for your driving comfort and enjoyment. Modern motor cars are extremely complex, and contain many parts. Occasionally, a failure of one of the parts may occur. Should you experience such a failure, you will find your nearest Holden Dealer well equipped to correct it as each dealership has special service tools and trained technicians.

If you are travelling and require service but you are too far from your servicing Dealer, you will find the name, address and telephone number of the dealer nearest to you, in the Holden Service Directory contained in this booklet.

# Vehicle emission control information

**Environmental protection and Holden**
It is a matter of great importance and also the duty of mankind to protect our atmosphere and environment against pollution and leave it clean and unpolluted to posterity. Holden has long been directing its technical efforts and resources toward fulfilling this important requirement. As a result, Holden has succeeded in developing various emission control systems that will minimize atmospheric pollution without sacrificing the vehicle utility.

The emission control systems installed in your vehicle comply with all the requirements of the relevant Australian Design Rules as well as various other regulations.

**Your role in controlling air polution**
To keep our air clean, you are responsible for the proper operation, maintenance and care of your vehicle in accordance with the instructions contained in this manual.

Do not remove or modify the emission control systems in any vehicle operating on public roads after the purchase of the vehicle. Any maintenance work on the emission control systems other than that specified by Holden should be avoided.

You are also responsible for keeping maintenance records as in some instances it may be necessary for you to substantiate that the required maintenance has been performed.

If you have services performed by someone other than an authorised Holden dealer, you should keep a file of the repair orders to show completion and compliance to these services.

**Fuel recommendations**
Your new vehicle must use only unleaded fuel: Research Octane No. 91 or higher.

Use of leaded petrol will cause the catalytic converter to lose its effectiveness and it will also cause the emission control system to function improperly. Further, this can increase maintenance costs.

To prevent leaded petrol from being poured into the fuel tank, your Nova has a small fuel tank opening. The nozzle on pumps with unleaded fuel will fit it, but the larger standard nozzle on pumps with leaded petrol will not.

**Sources of vehicle emission**
There are three kinds of gases emitted by the vehicle that pollute the atmosphere:

**1. Crankcase emission (Blow-by gas)**
This is the unburned gas in the cylinder that

leaks into the crankcase and is released into the atmosphere, and contains *hydrocarbons (HC).*

**2. Exhaust emission**

This is the gas formed by the combustion of the fuel inside the cylinder and discharged into the atmosphere through the exhaust pipe. It contains *carbon monoxide (CO), hydrocarbons (HC), and nitrogen oxides (NOx).*

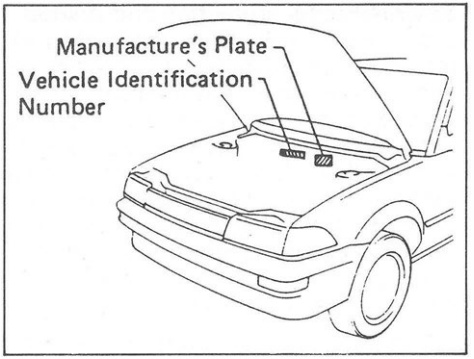
**3. Fuel evaporative emission**

This is the petrol vapor formed by vaporization in the fuel tank and carburettor. It contains *hydrocarbons (HC).*

**Vehicle emission control information label**

The vehicle emission control information label is adhered to the underside of your vehicle hood. This label contains the principle engine tune-up specifications relating to the exhaust emissions.

## Your Nova's identification




Vehicle Identification Number (VIN) is stamped on the engine compartment bulkhead.

The manufacturer's plate, mounted on the same bulkhead, contains VIN, Model data and date of manufacture (see below).

*Date of manufacture means:*
*The date of manufacture, hereinafter called the "Built Date", is the calendar month and year in which the body shell and power train sub-assemblies are conjoined and the vehicle is driven or moved from the production line.*

## 1000 km Inspection and Adjustment

HOLDEN WISE
QUALITY SERVICE & PARTS

## Free 1000 km Service Voucher

### Free Service Voucher

1. Adjust idle speed and fast idle speed (refer Vacuum Hose Information and Vehicle Emission Control Information under hood).
2. Adjust throttle positioner (TP) or dash pot (DP) refer Vacuum Hose Information and Vehicle Emission Control Information under vehicle hood).
3. Inspect A/C refrigerant level sight glass.
4. Inspect A/C pipe and tubes including alignment.
5. Inspect A/C idle cut-off and/or idle-up.
6. Inspect A/C drain tube.
7. Inspect clutch pedal, brake pedal and parking brake.
8. Inspect brake and clutch fluid.
9. Inspect brake line pipes and hoses.
10. Tighten chassis and body nuts and bolts.

**Oils and Materials used will be charged to the owner at the normal rate**

**Model**..... **V.I.N.**..... **Engine No.**.....

**Owner's Name and Address** .....

.....

**Name of selling Dealer** .....

**Name of Servicing Dealer** ..... **Service Date** .....

**Servicing Dealer's Signature**.....

**I hereby acknowledge receipt of the 1000 km free service**

**Owner's Signature** .....

**Date**.....

**km** .....

**Dealer Stamp**

## 10000 km

Times quoted are for engine oil and filter change plus inspections and adjustments 1 to 13 (except items listed under "Air conditioner") as required but do not include additional service items for severe or abnormal conditions or as may be recommended by your Dealer.

If vehicle is equipped with an Air Conditioner, add 0.3 of an hour to vehicle service time.

## 10000 km

APPROXIMATE SERVICE TIME (HOURS)

| | |
|---|---|
| Nova (all models) | 1.0 |

**Date**.....

**km**.....

**Dealer Stamp**

HOLDEN WISE
QUALITY SERVICE & PARTS

## 10000 km or 6 Months Service Voucher

### ENGINE COMPARTMENT

1. Replace engine oil (grade SF, SG or better).
2. Replace engine oil filter.
3. Inspect battery.
4. Inspect clutch fluid.
5. Inspect brake fluid.

### AIR CONDITIONER

6. Inspect refrigerant level sight glass.
7. Inspect pipes and tubes including alignment.
8. Inspect drain tube.
9. Inspect idle cut-off and/or idle-up.
10. Inspect condenser, clean if necessary.

### VEHICLE EXTERIOR

11. Inspect all lights, horns, wipers and windshield washers.
12. Inspect tyres and inflation pressures.

### ON ROAD

13. Road test.
14. Inspect front wheel alignment (side slip) when abnormal condition is noted.

***Item numbers underlined indicate service common to all models.***

*If vehicle has been subjected to severe or abnormal driving conditions, the following should also be serviced.*

### ENGINE COMPARTMENT

*a.) Inspect air filter.*

### UNDER VEHICLE

*a.) Tighten chassis and body bolts and nuts.*
*b.) Inspect drive shaft boots.*
*c.) Inspect steering linkage.*
*d.) Inspect exhaust pipes and mountings.*
*e.) Inspect brake line pipes and hoses.*

### VEHICLE EXTERIOR

*a.) Inspect ball joints and dust covers.*
*b.) Inspect brake linings and drums.*
*c.) Inspect brake pads and discs*

### VEHICLE INTERIOR

*a.) Inspect steering wheel.*

**Note: Oils and materials required to complete the 10000 km service are chargeable to Owner.**

Additional services requested .....

.....

Signature of/for Owner .....Date .....

## 20000 km

Times quoted are for engine oil and filter change plus inspections and adjustments 1 to 33 (except items listed under "Air conditioner") as required but do not include additional service items for severe or abnormal conditions or as may be recommended by your Dealer.

If vehicle is equipped with an Air Conditioner, add 0.3 of an hour to vehicle service time.

## 20000 km

HOLDEN WISE
QUALITY SERVICE & PARTS

## 20000 km or 12 Months Service Voucher

APPROXIMATE SERVICE TIME (HOURS)

Nova (all models) 1.8

Service Voucher abbreviations are given below:
A/T =Automatic Transaxle
M/T=Manual Transaxle

**Date**.....

**km**.....

**Dealer Stamp**

### ENGINE COMPARTMENT

1. Inspect drive belts.
2. Replace engine oil (grade SF, SG or better).
3. Replace engine oil filter.
4. Replace engine/radiator coolant. (See "Cooling system inhibitor selection" page 24)
5. Inspect air filter.
6. Inspect battery.
7. Replace spark plugs.
8. Adjust idle speed.
9. Adjust fast idle speed.
10. Adjust dash pot or throttle positioner system (refer Vacuum Hose Information Label under vehicle hood).
11. Inspect clutch fluid.
12. Inspect power steering fluid.
13. Inspect A/T fluid.
14. Inspect brake fluid.

### AIR CONDITIONER

15. Inspect refrigerant level sight glass.
16. Inspect pipes and tubes including alignment.
17. Inspect drain tube.
18. Inspect idle cut-off and/or idle-up.
19. Inspect condenser, clean if necessary.

### UNDER VEHICLE

20. Inspect brake line pipes and hoses.
21. Inspect steering linkage.
22. Inspect drive shaft boots.
23. Inspect M/T oil.
24. Inspect exhaust pipes and mountings.
25. Inspect differential gear oil (3 speed A/T).
26. Tighten chassis and body bolts and nuts.

### VEHICLE EXTERIOR

27. Inspect brake pads and discs.
28. Inspect ball joints and dust covers.
29. Inspect all lights, horns, wipers and windshield washers.
30. Inspect tyres and inflation pressures.

### VEHICLE INTERIOR

31. Inspect brake pedal and parking brake.
32. Inspect steering wheel.

### ON ROAD

33. Road test.
34. Inspect front wheel alignment (side slip) when abnormal condition is noted.

***Item numbers underlined indicate service is common to all models.***

*If vehicle has been subjected to severe or abnormal driving conditions, the following should also be serviced.*

### UNDER VEHICLE

*a.) Inspect front and rear suspension.*

### VEHICLE EXTERIOR

*a.) Inspect brake lining and drums.*

**Note: Oils and materials required to complete the 20000 km Service are chargeable to Owner.**

Additional services requested .....

.....

Signature of/for Owner .....Date .....

## 30000 km

Times quoted are for engine oil and filter change plus inspections and adjustments 1 to 13 (except items listed under "Air conditioner") as required but do not include additional service items for severe or abnormal conditions or as may be recommended by your Dealer.

If vehicle is equipped with an Air Conditioner, add 0.3 of an hour to vehicle service time.

## 30000 km

APPROXIMATE SERVICE TIME (HOURS)

| | |
|---|---|
| Nova (all models) | 1.0 |

**Date**.....

**km**.....

**Dealer Stamp**

HOLDEN WISE
QUALITY SERVICE & PARTS

## 30000 km or 18 Months Service Voucher

### ENGINE COMPARTMENT

1. Replace engine oil (grade SF, SG or better).
2. Replace engine oil filter.
3. Inspect battery.
4. Inspect clutch fluid.
5. Inspect brake fluid.

### AIR CONDITIONER

6. Inspect refrigerant level sight glass.
7. Inspect pipes and tubes including alignment.
8. Inspect drain tube.
9. Inspect idle cut-off and/or idle-up.
10. Inspect condenser, clean if necessary.

### VEHICLE EXTERIOR

11. Inspect all lights, horns, wipers and windshield washers.
12. Inspect tyres and inflation pressures.

### ON ROAD

13. Road test.
14. Inspect front wheel alignment (slide slip) when abnormal condition is noted.

***Item numbers underlined indicate service common to all models.***

*If vehicle has been subjected to severe or abnormal driving conditions, the following should also be serviced.*

### ENGINE COMPARTMENT

*a.) Inspect air filter.*

### UNDER VEHICLE

*a.) Tighten chassis and body bolts and nuts.*
*b.) Inspect drive shaft boots.*
*c.) Inspect steering linkage.*
*d.) Inspect exhaust pipes and mountings.*
*e.) Inspect brake line pipes and hoses.*

### VEHICLE EXTERIOR

*a.) Inspect ball joints and dust covers.*
*b.) Inspect brake linings and drums.*
*c.) Inspect brake pads and discs.*

### VEHICLE INTERIOR

*a.) Inspect steering wheel.*

**Note: Oils and materials required to complete the 30000 km Service are chargeable to Owner.**

Additional services requested .....

.....

Signature of/for Owner .....Date .....

## 40000 km

Times quoted are for engine oil and filter change plus inspections and adjustments 1 to 41 (except items listed under "Air conditioner") as required but do not include additional service items for severe or abnormal conditions or as may be recommended by your Dealer.

If vehicle is equipped with an Air Conditioner, add 0.3 of an hour to vehicle service time.

## 40000 km

APPROXIMATE SERVICE TIME (HOURS)

| | |
|---|---|
| Nova (M/T) | 2.8 |
| Nova (A/T 3 speed) | 2.9 |
| Nova (A/T 4 speed) | 2.8 |

Note: See description of abbreviation below
M/T=Manual Transmission
A/T =Automatic Transmission

**Date**.....

**km**.....

**Dealer Stamp**

HOLDEN WISE
QUALITY SERVICE & PARTS

## 40000 km or 24 Months Service Voucher

### ENGINE COMPARTMENT

1. Inspect drive belts.
2. Replace engine oil (grade SF, SG or better).
3. Replace engine oil filter.
4. Inspect cooling/heater system hoses and connections.
5. Replace engine/radiator coolant. (See "Cooling system inhibitor selection" page 24)
6. Replace air filter.
7. Inspect battery.
8. Replace spark plugs.
9. Inspect fuel lines, connections and fuel vapour control valve.
10. Replace charcoal canister.
11. Inspect choke system.
12. Adjust idle speed.
13. Adjust fast idle speed.
14. Adjust dash pot or throttle positioner system (refer Vacuum Hose Information Label under vehicle hood).
15. Inspect clutch fluid.
16. Inspect power steering fluid.
17. Inspect A/T fluid.

### AIR CONDITIONER

18. Inspect refrigerant level sight glass.
19. Inspect pipes and tubes including alignment.
20. Inspect drain tube.
21. Inspect idle cut-off and/or idle-up.
22. Inspect condenser, clean if necessary.

### UNDER VEHICLE

23. Inspect oil cooler host (A/T 4 speed).
24. Inspect exhaust pipes and mountings.
25. Inspect brake line pipes and hoses.
26. Inspect steering linkage.
27. Inspect drive shaft boots.
28. Inspect manual transaxle oil.
29. Replace differential gear oil (A/T 3 speed).
30. Inspect front and rear suspensions.
31. Tighten chassis and body bolts and nuts.

### VEHICLE EXTERIOR

32. Inspect fuel tank cap.
33. Inspect brake pads and discs.
34. Inspect brake linings and drums.
35. Replace brake fluid.
36. Inspect ball joints and dust covers.
37. Inspect all lights, horns, wipers and windshield washers.
38. Inspect tyres and inflation pressures.

### VEHICLE INTERIOR

39. Inspect brake pedal and parking brake.
40. Inspect steering wheel.

### ON ROAD

41. Road test.
42. Inspect front wheel alignment (side slip) when abnormal condition is noted.

***Item numbers underlined indicate service common to all models.***

**Note: Oils and materials required to complete the 40000 km Service are chargeable to Owner.**

Additional services requested .....

.....

Signature of/for Owner .....Date .....

## 50000 km

Times quoted are for engine oil and filter change plus inspections and adjustments 1 to 13 (except items listed uner "Air conditioner") as required but do not include additional service items for severe or abnormal conditions or as may be recommended by your Dealer.

If vehicle is equipped with an Air Conditioner, add 0.3 of an hour to vehicle service time.

## 50000 km

APPROXIMATE SERVICE TIME (HOURS)

Nova (all models) 1.0

Service voucher abbreviation is given below:
M/T=Manual Transaxle

**Date**.....

**km**.....

**Dealer Stamp**

HOLDEN WISE
QUALITY SERVICE & PARTS

## 50000 km or 30 Months Service Voucher

### ENGINE COMPARTMENT

1. Replace engine oil (grade SF, SG or better).
2. Replace engine oil filter.
3. Inspect battery.
4. Inspect clutch fluid.
5. Inspect brake fluid.

### AIR CONDITIONER

6. Inspect refrigerant level sight glass.
7. Inspect pipes and tubes including alignment.
8. Inspect drain tube.
9. Inspect idle cut-off and/or idle-up.
10. Inspect condenser, clean if necessary.

### VEHICLE EXTERIOR

11. Inspect all lights, horns, wipers and windshield washers.
12. Inspect tyres and inflation pressures.

### ON ROAD

13. Road test.
14. Inspect front wheel alignment (side slip) when abnormal condition is noted.

***Item numbers underlined indicate service common to all models.***

*If vehicle has been subjected to severe or abnormal driving conditions, the following should also be serviced.*

### ENGINE COMPARTMENT

*a.) Inspect air filter.*

### UNDER VEHICLE

*a.) Inspect exhaust pipes and mountings.*
*b.) Inspect drive shaft boots.*
*c.) Inspect steering linkage.*
*d.) Replace M/T oil.*
*e.) Tighten chassis and body bolts and nuts.*
*f.) Inspect brake line pipes and hoses.*

### VEHICLE EXTERIOR

*a.) Inspect brake pads and discs.*
*b.) Inspect brake linings and drums.*
*c.) Inspect ball joints and dust covers.*

### VEHICLE INTERIOR

*a.) Inspect steering wheel.*

**Note: Oils and materials required to complete the 50000 km service are chargeable to Owner.**

Additional services requested .....

.....

Signature of/for Owner .....Date .....

## 60000 km

Times quoted are for engine oil and filter change plus inspections and adjustments 1 to 33 (except items listed under "Air conditioner") as required but do not include additional service items for severe or abnormal conditions or as may be recommended by your Dealer.

If vehicle is equipped with an Air Conditioner, add 0.3 of an hour to vehicle service time.

## 60000 km

APPROXIMATE SERVICE TIME (HOURS)

| | |
|---|---|
| Nova (M/T) | 1.8 |
| Nova (A/T) | 2.2 |

Note: See description of abbreviation below.
M/T Manual Transaxle
A/T Automatic Transaxle

**Date**.....

**km**.....

**Dealer Stamp**

HOLDEN WISE
QUALITY SERVICE & PARTS

## 60000 km or 36 Months Service Voucher

### ENGINE COMPARTMENT

1. Inspect drive belts.
2. Replace engine oil (grade SF, SG or better).
3. Replace engine oil filter.
4. Replace engine/radiator coolant (see "Cooling system inhibitor selection" page 24).
5. Inspect air filter.
6. Inspect battery.
7. Replace spark plugs.
8. Adjust idle speed.
9. Adjust fast idle speed.
10. Adjust dash pot or throttle positioner system (refer Vacuum Hose Information Label under vehicle hood).
11. Inspect clutch fluid.
12. Inspect power steering fluid.
13. Inspect brake fluid.

### AIR CONDITIONER

14. Inspect refrigerant level sight glass.
15. Inspect pipes and tubes including alignment.
16. Inspect drain tube.
17. Inspect idle cut-off and/or idle-up.
18. Inspect condenser, clean if necessary.

### UNDER VEHICLE

19. Inspect brake line pipes and hoses.
20. Inspect steering linkage.
21. Inspect drive shaft boots.
22. Replace A/T fluid.
23. Inspect M/T oil.
24. Inspect exhaust pipes and mountings.
25. Inspect differential gear oil (A/T 3 speed).
26. Tighten chassis and body bolts and nuts.

### VEHICLE EXTERIOR

27. Inspect brake pads and discs.
28. Inspect bail joints and dust covers.
29. Inspect all lights, horns, wipers and windshield washers.
30. Inspect tyres and inflation pressures.

### VEHICLE INTERIOR

31. Inspect brake pedal and parking brake.
32. Inspect steering wheel.

### ON ROAD

33. Road test.
34. Inspect front wheel alignment (side slip) when abnormal condition is noted.

***Item numbers underlined indicate service common to all models.***

*If vehicle has been subjected to severe or abnormal driving conditions, the following should also be serviced.*

### UNDER VEHICLE

*a.) Inspect front and rear suspensions.*

### VEHICLE EXTERIOR

*a.) Inspect brake linings and drums.*

**Note: Oils and materials required to complete the 60000 km Service are chargeable to Owner.**

Additional services requested .....

.....

Signature of/for Owner .....Date .....

## 70000 km

Times quoted are for engine oil and filter change plus inspections and adjustments 1 to 13 (except items listed under "Air conditioner") as required but do not include additional service items for severe or abnormal conditions or as may be recommended by your Dealer.

If vehicle is equipped with an Air Conditioner, add 0.3 of an hour to vehicle service time.

## 70000 km

APPROXIMATE SERVICE TIME (HOURS)

| | |
|---|---|
| Nova (all models) | 1.0 |

**Date**.....

**km**.....

**Dealer Stamp**

HOLDEN WISE
QUALITY SERVICE & PARTS

## 70000 km or 42 Months Service Voucher

### ENGINE COMPARTMENT

1. Replace engine oil (grade SF, SG or better).
2. Replace engine oil filter.
3. Inspect battery.
4. Inspect clutch fluid.
5. Inspect brake fluid.

### AIR CONDITIONER

6. Inspect refrigerant level sight glass.
7. Inspect pipes and tubes including alignment.
8. Inspect drain tube.
9. Inspect idle cut-off and/or idle-up.
10. Inspect condenser, clean if necessary.

### VEHICLE EXTERIOR

11. Inspect all lights, horns, wipers and windshield washers.
12. Inspect tyres and inflation pressures.

### ON ROAD

13. Road test.
14. Inspect front wheel alignment (side slip) when abnormal condition is noted.

***Item numbers underlined indicated service common to all models.***

*If vehicle has been subjected to severe or abnormal driving conditions, the following should also be serviced.*

### ENGINE COMPARTMENT

*a.) Inspect air filter.*

### UNDER VEHICLE

*a.) Tighten chassis and body bolts and nuts.*
*b.) Inspect drive shaft boots.*
*c.) Inspect steering linkage.*
*d.) Inspect exhaust pipes and mountings.*
*e.) Inspect brake line pipes and hoses.*

### VEHICLE EXTERIOR

*a.) Inspect ball joints and dust covers.*
*b.) Inspect brake linings and drums.*
*c.) Inspect brake pads and discs.*

### VEHICLE INTERIOR

*a.) Inspect steering wheel.*

**Note: Oils and materials required to complete the 70000 km Service are chargeable to Owner.**

Additional services requested .....

.....

Signature of/for Owner .....Date .....

## 80000 km

Times quoted are for engine oil and filter change plus insspections and adjustments 1 to 43 (except items listed under "Air Conditioner") as required but do not include additional service items for severe or abnormal conditions or as may be recommended by your Dealer.

If vehicle is equipped with an Air Conditioner, add 0.3 of an hour to vehicle service time.

## 80000 km

APPROXIMATE SERVICE TIME (HOURS)

| | |
|---|---|
| Nova (M/T) | 4.4 |
| Nova (A/T 3 speed) | 4.5 |
| Nova (A/T 4 speed) | 4.4 |

Note: See description of abbreviation below
M/T=Manual Transaxle
A/T =Automatic Transaxle

**Date**.....

**km**.....

**Dealer Stamp**

HOLDEN WISE
QUALITY SERVICE & PARTS

## 80000 km or 48 Months Service Voucher

### ENGINE COMPARTMENT

1. Adjust valve clearance.
2. Inspect drive belts.
3. Replace engine oil (grade SF, SG or better).
4. Replace engine oil filter.
5. Inspect cooling/heater system hoses and connections.
6. Replace engine/radiator coolant (see "Cooling system inhibitor selection" page 24).
7. Replace air filter.
8. Inspect battery.
9. Replace spark plugs.
10. Replace fuel filter.
11. Inspect fuel lines, connections and fuel vapour control valve.
12. Replace charcoal canister.
13. Inspect choke system.
14. Adjust idle speed.
15. Adjust fast idle speed.
16. Adjust dash pot or throttle positioner system (refer Vacuum Hose Information Label under vehicle hood).
17. Inspect clutch fluid.
18. Inspect power steering fluid.
19. Inspect A/T fluid.

### AIR CONDITIONER

20. Inspect refrigerant level sight glass.
21. Inspect pipes and tubes including alignment.
22. Inspect drain tube.
23. Inspect idle cut-off and/or idle-up.
24. Inspect condenser, clean if necessary.

### UNDER VEHICLE

25. Inspect oil cooler hoses (A/T 4 speed).
26. Inspect exhaust pipes and mountings.
27. Inspect brake line pipes and hoses.
28. Inspect steering linkage.
29. Inspect drive shaft boots.
30. Inspect M/T oil.
31. Replace differential gear oil (A/T 3 speed).
32. Inspect front and rear suspensions.
33. Tighten chassis and body bolts and nuts.

### VEHICLE EXTERIOR

34. Inspect fuel tank cap.
35. Inspect brake pads and discs.
36. Inspect brake linings and drums.
37. Replace brake fluid.
38. Inspect ball joints and dust covers.
39. Inspect all lights, horns, wipers and windshield washers.
40. Inspect tyres and inflation pressures.

### VEHICLE INTERIOR

41. Inspect brake pedal and parking brake.
42. Inspect steering wheel.

### ON ROAD

43. Road test.
44. Inspect front wheel alignment (side-slip) when abnormal condition is noted.

***Item numbers underlined indicate service common to all models.***

**Note: Oils and materials required to complete the 80000 km service are chargeable to Owner.**

Additional services requested .....

.....

Signature of/for Owner .....Date .....

## Notice of Name/Address Ownership Change

PLEASE TICK APPROPRIATE SQUARE

☐ NAME/ADDRESS CHANGE

☐ SUBSEQUENT OWNER

Owner's Name Mr. Mrs. ..... Miss

Address.....

Town .....

State .....

Registration No.....

Vehicle Identification Number (VIN).....

To ensure continued interest in your vehicle, Holden's requests that owners who change their name or address (or subsequent owners who purchase the vehicle) fill in and mail one of the attached notices. Please forward to the address shown on the reverse side of the notice.


## Notice of Name/Address Ownership Change

PLEASE TICK APPROPRIATE SQUARE

☐ NAME/ADDRESS CHANGE

☐ SUBSEQUENT OWNER

Owner's Name Mr. Mrs. ..... Miss

Address.....

Town .....

State .....

Registration No.....

Vehicle Identification Number (VIN).....

To ensure continued interest in your vehicle, Holden's requests that owners who change their name or address (or subsequent owners who purchase the vehicle) fill in and mail one of the attached notices. Please forward to the address shown on the reverse side of the notice.

*Place in an envelope and mail to:*

**The Manager—Warranty Administration**
**Service Department**
**General Motors-Holden's Automotive Limited**
**Box 548D, G.P.O.**
**Melbourne,**
**Victoria, 3001.**

*Place in an envelope and mail to:*

**The Manager—Warranty Administration**
**Service Department**
**General Motors-Holden's Automotive Limited**
**Box 548D, G.P.O.**
**Melbourne,**
**Victoria, 3001.**